

**DATA VALIDATION REPORT
GROUNDWATER QUALITY DATA
SEMI-ANNUAL SAMPLING
JUNE 2008**

CITY OF HELENA LANDFILL

Prepared For:
CITY OF HELENA
HELENA, MONTANA



Hydrometrics, Inc.
consulting scientists and engineers

JULY 2008

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July 31, 2008

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KL
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Dept. of Enviro. Quality
Waste & Underground
Tank Management Bureau

RE: Results of June 2008 Groundwater Sampling

Dear Mary:

Enclosed for your information is the data validation report including field notes and copies of the lab data sheets for the semiannual groundwater samples collected for the Helena Landfill in June 2008. If you have any questions concerning this data, please don't hesitate to call.

Sincerely,

Jodi Bingham, P.E.
Environmental Engineer/Chemist

Enclosure

DATA VALIDATION REPORT CITY OF HELENA LANDFILL

Groundwater Samples Collected in

June 2008

(Semi-Annual Sampling)

Prepared by
Hydrometrics, Inc.
3020 Bozeman Avenue
Helena, MT 59601

July 2008

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GLOSSARY OF TERMS

CCB.....	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CLP	Contract Laboratory Program
CRDL.....	Contract Required Detection Limit
FAA	Flame Atomic Absorption
GFAA.....	Graphite Furnace Atomic Absorption
HGAA.....	Hydride Generation Atomic Absorption
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICV.....	Initial Calibration Verification
IDL	Instrument Detection Limit
LCS	Laboratory Control Sample
MSA.....	Method of Standard Additions
PB.....	Preparation Blank
PRDL	Project Required Detection Limit
QAPP	Quality Assurance Project Plan
QC.....	Quality Control
RPD.....	Relative Percent Difference
RSD.....	Relative Standard Deviation
SOW.....	Statement of Work
TDS	Total Dissolved Solids

SUMMARY

Groundwater samples collected for the City of Helena Landfill in June 2008 have been validated in accordance with the project work plan, "Revised Sampling and Analysis Plan; City of Helena Landfill; Groundwater, Surface Water, and Landfill Gas Monitoring Activities" (Hydrometrics, April 2006). The data quality objectives for accuracy and precision were met, as 99 percent of the field quality control sample results were within control limits and 98 percent of the laboratory quality control samples were within limits. Completeness as evaluated by the number of valid measurements (measurements not rejected) per number of actual measurements, was 100 percent. Further discussion of data quality objectives is in Section 12 of the data validation report. All tables are in Appendix 1: data validation codes and definitions are listed in Table 1; a brief summary of flagged data is in Table 3; and a historical comparison is in Table 2. A database printout of this sampling event is located in Appendix 2. The Hydrometrics field notes are in Appendix 3. Energy Laboratories Analytical Reports are located in Appendix 4.

DATE	TIME	LOCATION	DEPTH	ANALYST	LABORATORY	RESULTS	REMARKS
2008-06-10	08:00	HL-01	10'	J. Smith	EL-001	1.2	
2008-06-10	08:15	HL-02	15'	J. Smith	EL-002	0.8	
2008-06-10	08:30	HL-03	20'	J. Smith	EL-003	0.5	
2008-06-10	08:45	HL-04	25'	J. Smith	EL-004	0.3	
2008-06-10	09:00	HL-05	30'	J. Smith	EL-005	0.2	
2008-06-10	09:15	HL-06	35'	J. Smith	EL-006	0.1	
2008-06-10	09:30	HL-07	40'	J. Smith	EL-007	0.1	
2008-06-10	09:45	HL-08	45'	J. Smith	EL-008	0.1	
2008-06-10	10:00	HL-09	50'	J. Smith	EL-009	0.1	
2008-06-10	10:15	HL-10	55'	J. Smith	EL-010	0.1	
2008-06-10	10:30	HL-11	60'	J. Smith	EL-011	0.1	
2008-06-10	10:45	HL-12	65'	J. Smith	EL-012	0.1	
2008-06-10	11:00	HL-13	70'	J. Smith	EL-013	0.1	
2008-06-10	11:15	HL-14	75'	J. Smith	EL-014	0.1	
2008-06-10	11:30	HL-15	80'	J. Smith	EL-015	0.1	
2008-06-10	11:45	HL-16	85'	J. Smith	EL-016	0.1	
2008-06-10	12:00	HL-17	90'	J. Smith	EL-017	0.1	
2008-06-10	12:15	HL-18	95'	J. Smith	EL-018	0.1	
2008-06-10	12:30	HL-19	100'	J. Smith	EL-019	0.1	
2008-06-10	12:45	HL-20	105'	J. Smith	EL-020	0.1	
2008-06-10	13:00	HL-21	110'	J. Smith	EL-021	0.1	
2008-06-10	13:15	HL-22	115'	J. Smith	EL-022	0.1	
2008-06-10	13:30	HL-23	120'	J. Smith	EL-023	0.1	
2008-06-10	13:45	HL-24	125'	J. Smith	EL-024	0.1	
2008-06-10	14:00	HL-25	130'	J. Smith	EL-025	0.1	
2008-06-10	14:15	HL-26	135'	J. Smith	EL-026	0.1	
2008-06-10	14:30	HL-27	140'	J. Smith	EL-027	0.1	
2008-06-10	14:45	HL-28	145'	J. Smith	EL-028	0.1	
2008-06-10	15:00	HL-29	150'	J. Smith	EL-029	0.1	
2008-06-10	15:15	HL-30	155'	J. Smith	EL-030	0.1	
2008-06-10	15:30	HL-31	160'	J. Smith	EL-031	0.1	
2008-06-10	15:45	HL-32	165'	J. Smith	EL-032	0.1	
2008-06-10	16:00	HL-33	170'	J. Smith	EL-033	0.1	
2008-06-10	16:15	HL-34	175'	J. Smith	EL-034	0.1	
2008-06-10	16:30	HL-35	180'	J. Smith	EL-035	0.1	
2008-06-10	16:45	HL-36	185'	J. Smith	EL-036	0.1	
2008-06-10	17:00	HL-37	190'	J. Smith	EL-037	0.1	
2008-06-10	17:15	HL-38	195'	J. Smith	EL-038	0.1	
2008-06-10	17:30	HL-39	200'	J. Smith	EL-039	0.1	
2008-06-10	17:45	HL-40	205'	J. Smith	EL-040	0.1	
2008-06-10	18:00	HL-41	210'	J. Smith	EL-041	0.1	
2008-06-10	18:15	HL-42	215'	J. Smith	EL-042	0.1	
2008-06-10	18:30	HL-43	220'	J. Smith	EL-043	0.1	
2008-06-10	18:45	HL-44	225'	J. Smith	EL-044	0.1	
2008-06-10	19:00	HL-45	230'	J. Smith	EL-045	0.1	
2008-06-10	19:15	HL-46	235'	J. Smith	EL-046	0.1	
2008-06-10	19:30	HL-47	240'	J. Smith	EL-047	0.1	
2008-06-10	19:45	HL-48	245'	J. Smith	EL-048	0.1	
2008-06-10	20:00	HL-49	250'	J. Smith	EL-049	0.1	
2008-06-10	20:15	HL-50	255'	J. Smith	EL-050	0.1	
2008-06-10	20:30	HL-51	260'	J. Smith	EL-051	0.1	
2008-06-10	20:45	HL-52	265'	J. Smith	EL-052	0.1	
2008-06-10	21:00	HL-53	270'	J. Smith	EL-053	0.1	
2008-06-10	21:15	HL-54	275'	J. Smith	EL-054	0.1	
2008-06-10	21:30	HL-55	280'	J. Smith	EL-055	0.1	
2008-06-10	21:45	HL-56	285'	J. Smith	EL-056	0.1	
2008-06-10	22:00	HL-57	290'	J. Smith	EL-057	0.1	
2008-06-10	22:15	HL-58	295'	J. Smith	EL-058	0.1	
2008-06-10	22:30	HL-59	300'	J. Smith	EL-059	0.1	
2008-06-10	22:45	HL-60	305'	J. Smith	EL-060	0.1	
2008-06-10	23:00	HL-61	310'	J. Smith	EL-061	0.1	
2008-06-10	23:15	HL-62	315'	J. Smith	EL-062	0.1	
2008-06-10	23:30	HL-63	320'	J. Smith	EL-063	0.1	
2008-06-10	23:45	HL-64	325'	J. Smith	EL-064	0.1	
2008-06-10	24:00	HL-65	330'	J. Smith	EL-065	0.1	
2008-06-10	24:15	HL-66	335'	J. Smith	EL-066	0.1	
2008-06-10	24:30	HL-67	340'	J. Smith	EL-067	0.1	
2008-06-10	24:45	HL-68	345'	J. Smith	EL-068	0.1	
2008-06-10	25:00	HL-69	350'	J. Smith	EL-069	0.1	
2008-06-10	25:15	HL-70	355'	J. Smith	EL-070	0.1	
2008-06-10	25:30	HL-71	360'	J. Smith	EL-071	0.1	
2008-06-10	25:45	HL-72	365'	J. Smith	EL-072	0.1	
2008-06-10	26:00	HL-73	370'	J. Smith	EL-073	0.1	
2008-06-10	26:15	HL-74	375'	J. Smith	EL-074	0.1	
2008-06-10	26:30	HL-75	380'	J. Smith	EL-075	0.1	
2008-06-10	26:45	HL-76	385'	J. Smith	EL-076	0.1	
2008-06-10	27:00	HL-77	390'	J. Smith	EL-077	0.1	
2008-06-10	27:15	HL-78	395'	J. Smith	EL-078	0.1	
2008-06-10	27:30	HL-79	400'	J. Smith	EL-079	0.1	
2008-06-10	27:45	HL-80	405'	J. Smith	EL-080	0.1	
2008-06-10	28:00	HL-81	410'	J. Smith	EL-081	0.1	
2008-06-10	28:15	HL-82	415'	J. Smith	EL-082	0.1	
2008-06-10	28:30	HL-83	420'	J. Smith	EL-083	0.1	
2008-06-10	28:45	HL-84	425'	J. Smith	EL-084	0.1	
2008-06-10	29:00	HL-85	430'	J. Smith	EL-085	0.1	
2008-06-10	29:15	HL-86	435'	J. Smith	EL-086	0.1	
2008-06-10	29:30	HL-87	440'	J. Smith	EL-087	0.1	
2008-06-10	29:45	HL-88	445'	J. Smith	EL-088	0.1	
2008-06-10	30:00	HL-89	450'	J. Smith	EL-089	0.1	
2008-06-10	30:15	HL-90	455'	J. Smith	EL-090	0.1	
2008-06-10	30:30	HL-91	460'	J. Smith	EL-091	0.1	
2008-06-10	30:45	HL-92	465'	J. Smith	EL-092	0.1	
2008-06-10	31:00	HL-93	470'	J. Smith	EL-093	0.1	
2008-06-10	31:15	HL-94	475'	J. Smith	EL-094	0.1	
2008-06-10	31:30	HL-95	480'	J. Smith	EL-095	0.1	
2008-06-10	31:45	HL-96	485'	J. Smith	EL-096	0.1	
2008-06-10	32:00	HL-97	490'	J. Smith	EL-097	0.1	
2008-06-10	32:15	HL-98	495'	J. Smith	EL-098	0.1	
2008-06-10	32:30	HL-99	500'	J. Smith	EL-099	0.1	
2008-06-10	32:45	HL-100	505'	J. Smith	EL-100	0.1	

DATA VALIDATION REPORT

1. INTRODUCTION

This validation applies to organic analytes for 26 water samples collected for the City of Helena Landfill quarterly monitoring project during the June 17-19, 2008 sampling event. The total number of samples included: one duplicate, one rinsate blank, one trip blank; and no field observations.

All samples were submitted for volatile organic analyses, and select samples were submitted for inorganic analyses (metals and wet chemistry) as follows:

SITE CODE	SAMPLE DATE	SAMPLE NUMBER	COMMONS	NUTRIENTS	DISSOLVED METALS	CYANIDE TOT	VOLATILES METHOD 8260
MPC-2	6/17/08	HL-0806-100					X
INF GALLERY	6/17/08	HL-0806-101					X
HL-90-1	6/18/08	HL-0806-102					X
HL-90-2	6/19/08	HL-0806-103	X	X	X	X	X
HL-94-2	6/17/08	HL-0806-104	X	X	X	X	X
RES #52	6/17/08	HL-0806-105					X
RES #57	6/17/08	HL-0806-106					X
HL-06-1	6/17/08	HL-0806-107	X	X	X	X	X
EPA-1	6/17/08	HL-0806-108	X	X	X	X	X
HL-94-3	6/18/08	HL-0806-109	X	X	X	X	X
RES #40	6/18/08	HL-0806-110					X
RES #48	6/18/08	HL-0806-111					X
MPC-1	6/18/08	HL-0806-112	X	X	X	X	X
RES #16	6/18/08	HL-0806-113					X
HL-90-3	6/18/08	HL-0806-114	X	X	X	X	X
HL-90-3 DUP	6/18/08	HL-0806-115	X	X	X	X	X
HL-94-1	6/18/08	HL-0806-116	X	X	X	X	X
MPC-5	6/18/08	HL-0806-117	X	X	X	X	X
I-4	6/18/08	HL-0806-118					X
RES #5	6/18/08	HL-0806-119					X
HL-99-3	6/19/08	HL-0806-120	X	X	X	X	X
HL-99-2	6/19/08	HL-0806-121	X	X	X	X	X
HL-99-1	6/19/08	HL-0806-122	X	X	X	X	X
RES #62	6/18/08	HL-0806-123					X
RINSATE BLANK	6/19/08	HL-0806-124	X	X	X	X	X
TRIP BLANK	6/17/08	HL-0806-125					X

- Validation procedures used are generally consistent with:

(Check all that apply)

- ☒ EPA CLP National Functional Guidelines for Inorganics Data Review
- ☒ EPA CLP National Functional Guidelines for Organic Data Review
- ☒ Work Plan (Sampling and Analysis Plan, City of Helena Landfill Groundwater Monitoring Activities, Hydrometrics, April 2006)

- Overall level of validation:

- ☐ Contract Laboratory Program (CLP)
- ☒ Standard
- ☐ Visual

The review of this data includes checking all field and laboratory quality control samples; flagging for exceedances in field quality control; and calculating precision, accuracy, and completeness for both laboratory and field quality control samples.

2. DELIVERABLES

- All laboratory document deliverables were present as specified in the CLP-Statement of Work (CLP-SOW), EPA, 1993 and/or the project contract.

☒ Yes
☐ No

- All documentation of field procedures was provided as required.

☒ Yes
☐ No

3. FIELD QUALITY CONTROL SAMPLES

Blanks: Please note that the highest blank value associated with any particular analyte is the blank value used for the flagging process.

DI, trip, rinsate, or any other field blanks have been carried out at the proper frequency.

☒ Yes
☐ No

Reported results on the field blanks are less than the contract required detection limits (CRDL) or the project required detection limits (PRDL) if project detection limits have been specified.

☐ Yes
☒ No (Notes)

NOTES: Field blank HL-0706-124 (Rinsate Blank) had results that exceeded the contract required detection limit for bromodichloromethane, chlorodibromomethane, and chloroform. The chloroform exceedance resulted in three associated results being flagged.

- **Field duplicates**

Field duplicates have been collected at the proper frequency.

☒ Yes
☐ No

Field duplicate relative percent differences (RPD's) were within the required control limits (RPD of 20 percent or less for water matrix, 35 percent or less for soil matrix). If the sample or duplicate result is less than 5 times the PRDL, the RPD criteria are not used. In these cases, the difference between the sample and the duplicate results must be within $\pm$ the PRDL for water matrix, within $\pm$ 2 times the PRDL for soil matrix.

☒ Yes
☐ No

- **Field standards**

Field standards were sent at the proper frequency

☐ Yes
☐ No
☒ NA - Not required by the work plan.

4. LABORATORY PROCEDURES

- **Laboratory procedures followed**

☐ CLP-SOW
☒ SW-846
☒ Methods for Chemical Analysis of Water and Wastes
☐ XRF Standard Operating Procedures
☐ Other

- **Samples were received by the laboratory at the proper temperature**

☒ Yes
☐ No

- **Holding times met**

☒ Yes
☐ No

- **Consistency with project requirements**

Analyses were carried out as requested.

☒ Yes
☐ No

Project specified methods were used.

☒ Yes

☐ No

5. DETECTION LIMITS

- Reporting detection limits met project required detection limits (PRDL).

☒ Yes

☐ No

6. LABORATORY BLANKS

Please note that the highest blank value associated with any particular analyte is the blank value used for the flagging process.

- **Preparation/Method blanks**

Preparation/Method blanks were prepared and analyzed at the required frequency.

☒ Yes

☐ No

All analytes in the preparation blank were less than the CRDL (or PRDL if a project detection limit has been specified).

☒ Yes

☐ No

7. LABORATORY BLANK SPIKES

- **Blank Spikes**

Blank spikes (organics) were prepared and analyzed at the required frequency.

☒ Yes

☐ No

Blank spike recoveries were within control limits.

☒ Yes

☐ No

8. SURROGATE SPIKES

- **Surrogate Spikes**

Surrogate spikes were prepared and analyzed at the required frequency.

☒ Yes

☐ No

Surrogate spike recoveries were within control limits.

☒ Yes

☐ No

9. MATRIX SPIKE /MATRIX SPIKE DUPLICATES (MS/MSD)

- Matrix spike samples were analyzed at the proper frequency.

☒ Yes

☐ No

Matrix spike recoveries were within control limits.

☐ Yes

☒ No (Notes)

- Matrix spike duplicate samples were analyzed at the proper frequency.

☒ Yes

☐ No

Matrix spike duplicate RPD's were within control limits.

☐ Yes

☒ No (Notes)

NOTES: Both matrix spike and matrix spike duplicate samples had several QC exceedances. These exceedances are only noted and no flagging of the associated data occurs.

10. INTERPARAMETER RELATIONSHIPS

- The following relationships have been checked for all data from the June 2008 monitoring:

☒ Lab SC versus field SC

☒ Lab pH versus field pH

Lab SC versus field SC: A comparison of the field and lab SCs using a percent difference (%D) criteria for evaluation purposes, showed that two of the SC pairs exceeded the ten percent comparison criteria.

Lab pH versus field pH: A comparison of the field and lab pHs using a percent difference (%D) criteria for evaluation purposes, showed that only one of the pH pairs exceeded the ten percent comparison criteria.

12. DATA QUALITY OBJECTIVES

- Project data quality objectives (DQO's) met.

X Yes

 No

Accuracy

Accuracy for this project is the agreement between a measured value and a true value and is measured by the recoveries on the laboratory matrix spikes and laboratory control samples.

Accuracy for this sampling event was 99 percent.

Precision

Precision for this project is the degree of variability between duplicate measurements. Laboratory analytical variability is measured by laboratory duplicates; field duplicates are a measure of overall variability in both field sampling and laboratory techniques.

Laboratory precision was 98 percent for this sampling event.

Field precision was 99 percent for this sampling event.

Completeness

The target completeness for this project is 90 percent of the measurements valid (not rejected). This percentage is based on the number of valid measurements compared to the number of planned measurements.

Completeness for this sampling event was 100 percent.

DATA VALIDATION REPORT

Prepared by: **Ericka Vallance**

REFERENCES

- Hem, J.D., 1992. Study and Interpretation of the Chemical Characteristics of Natural Water, 3rd Edition. US Geological Survey Water Supply Paper 2254.
- Hydrometrics Project Work Plan. Sampling and Analysis Plan City of Helena Landfill Groundwater Monitoring Activities, April 2006.
- U.S. Environmental Protection Agency, 1990. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition.
- U.S. Environmental Protection Agency, 1993. USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review. October 2004.
- U.S. Environmental Protection Agency, 1994. USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review. October 2004.

APPENDIX 1

TABLES

TABLE 1.

DATA VALIDATION CODES AND DEFINITIONS

<u>CODE</u>	<u>DEFINITION</u>
J -	The associated numerical value is an estimated quantity because quality control criteria were not met.
U -	Blank contamination. Indicates possible high bias and / or false positive. The associated value is an estimate.
R -	Quality control indicates that the data are unusable (compound may or may not be present). Resampling and/or reanalysis is necessary for verification.
A -	Anomalous data. No apparent explanation for discrepancy in data. (Not an EPA code.)

TABLE 2.0
SUMMARY OF THE COMPARISON OF SAMPLING PERIOD DATA TO THE DATABASE PERIOD DATA, SHOWING PARAMETERS THAT ARE HIGHEST OR
OR LOWEST OR THREE OR MORE STANDARD DEVIATIONS FROM THE MEAN OF THE DATABASE PERIOD AND THE RELATIONSHIP TO THESE DATA

DataMan Program

CITY OF HELENA Historical Comparison

SITE	SAMPLE DATE	RESULT mg/L	PARAMETER	COMPARISON		MIN (mg/L)	MEAN (mg/L)	MAX (mg/L)	STD DEVS FROM MEAN	RELATION TO DATABASE PERIOD
				DATABASE PERIOD	N					
5	06/18/2008	0.004	TETRACHLOROETHENE	06/17/2005-03/31/2008	12	0.0025	0.0033	0.0039	1.80	HIGHEST
16	06/18/2008	0.0015	TETRACHLOROETHENE	06/16/2005-12/18/2007	6	<0.001		0.0013		HIGHEST
48	06/18/2008	0.0038	CHLOROFORM	06/17/2005-12/19/2007	6	0.0039	0.0045	0.006	0.84	LOWEST
EPA-1	06/17/2008	92.0	CHLORIDE (CL)	06/17/2005-12/20/2007	6	78.0	82.8333	88.0	1.96	HIGHEST
		0.02	NICKEL (NI) DIS	06/17/2005-12/20/2007	6	<0.01	0.0117	0.02	2.04	HIGHEST
HL-06-1	06/17/2008	86.0	SULFATE (SO4)	12/12/2006-12/19/2007	3	113.0	160.0000	231.0	1.18	LOWEST
		26.0	CHLORIDE (CL)	12/12/2006-12/19/2007	3	35.0	36.6667	40.0	3.70	LOWEST
		0.81	NITRATE + NITRITE AS N	12/12/2006-12/19/2007	3	1.16	2.1733	3.8	0.96	LOWEST
HL-90-1	06/18/2008	0.0012	1,1-DICHLOROETHANE	03/24/2006-03/31/2008	5	0.0016	0.0021	0.0025	1.96	LOWEST
		0.0012	CHLOROFORM	03/24/2006-03/31/2008	5	0.0014	0.0016	0.002	1.57	LOWEST
		0.0039	TETRACHLOROETHENE	03/24/2006-03/31/2008	5	0.0047	0.0059	0.0091	1.13	LOWEST
HL-94-1	06/18/2008	0.0063	CHLOROFORM	06/16/2005-12/20/2007	6	0.0091	0.0250	0.037	1.54	LOWEST
HL-94-2	06/17/2008	65.0	CHLORIDE (CL)	06/16/2005-12/19/2007	6	75.0	107.0000	127.0	1.97	LOWEST
		0.008	ARSENIC (AS) DIS	06/16/2005-12/19/2007	6	0.007	0.0078	0.008	0.41	HIGHEST
		19.0	CHEMICAL OXYGEN DEMAND	06/16/2005-12/19/2007	6	<1	7.5000	10	3.45	HIGHEST
HL-94-3	06/18/2008	79.0	CHLORIDE (CL)	06/16/2005-12/19/2007	6	63.0	67.8333	73.0	2.97	HIGHEST
		0.07	IRON (FE) DIS	06/16/2005-12/19/2007	6	<0.03		<0.03		HIGHEST
		0.01	CYANIDE (CN) TOT	06/16/2005-12/19/2007	6	<0.005		0.009		HIGHEST
HL-99-1	06/19/2008	170.0	SULFATE (SO4)	06/17/2005-12/21/2007	5	15.0	118.6000	153.0	0.88	HIGHEST
		71.0	CHLORIDE (CL)	06/17/2005-12/21/2007	5	47.0	55.0000	60.0	3.30	HIGHEST
HL-99-2	06/19/2008	6.75	NITRATE + NITRITE AS N	06/17/2005-12/21/2007	5	7.46	7.6680	7.87	5.55	LOWEST
		0.0012	1,1-DICHLOROETHANE	06/17/2005-03/31/2008	11	0.0013	0.0022	0.0039	1.05	LOWEST
		0.0016	CHLOROFORM	06/17/2005-03/31/2008	11	0.0017	0.0021	0.0028	1.38	LOWEST
		0.0033	TETRACHLOROETHENE	06/17/2005-03/31/2008	11	0.0035	0.0052	0.0076	1.26	LOWEST
		0.013	CYANIDE (CN) TOT	06/17/2005-12/21/2007	5	<0.005	0.0070	0.012	2.06	HIGHEST
HL-99-3	06/19/2008	160.0	SULFATE (SO4)	06/17/2005-12/20/2007	6	124.0	141.5000	158.0	1.23	HIGHEST
		50.0	CHLORIDE (CL)	06/17/2005-12/20/2007	6	46.0	47.1667	49.0	2.42	HIGHEST
		0.038	CYANIDE (CN) TOT	06/17/2005-12/20/2007	6	<0.005	0.0163	0.03	2.13	HIGHEST
I-4	06/18/2008	0.0014	CHLOROFORM	06/17/2005-06/19/2007	3	0.0021	0.0025	0.0028	3.05	LOWEST
MPC-1	06/18/2008	0.002	1,1-DICHLOROETHANE	06/17/2005-12/19/2007	6	0.0025	0.0029	0.0035	2.39	LOWEST
		0.0018	CHLOROFORM	06/17/2005-12/19/2007	6	0.0019	0.0021	0.0023	2.13	LOWEST
		0.0062	TETRACHLOROETHENE	06/17/2005-12/19/2007	6	0.0082	0.0093	0.013	1.65	LOWEST
		0.0016	TRICHLOROETHENE	06/17/2005-12/19/2007	6	0.0017	0.0022	0.003	1.15	LOWEST
MPC-5	06/18/2008	18.8	NITRATE + NITRITE AS N	06/17/2005-12/19/2007	6	33.0	47.9000	73.0	2.03	LOWEST
		0.037	ARSENIC (AS) DIS	06/17/2005-12/19/2007	6	<0.005		0.006		HIGHEST
		0.02	COBALT (CO) DIS	06/17/2005-12/19/2007	6	<0.01	0.0117	0.02	2.04	HIGHEST
		0.02	COPPER (CU) DIS	06/17/2005-12/19/2007	6	<0.01		<0.01		HIGHEST
		0.05	NICKEL (NI) DIS	06/17/2005-12/19/2007	6	<0.01	0.0117	0.02	9.39	HIGHEST
		0.5	VANADIUM (V) DIS	06/17/2005-12/19/2007	6	<0.1		<0.1		HIGHEST
		10.6	CYANIDE (CN) TOT	06/17/2005-12/19/2007	6	0.77	3.0633	5.35	5.01	HIGHEST

NOTES: All quantities in mg/L (Water) or mg/kg (Soil) unless noted. All results LABORATORY unless field (FLD) or calculated (CALC).

N: Number of samples in comparison data set; 50% of data set must be above lab detection limit before mean, median, & SD calculation.

A & R Flags were excluded from Statistics

The detection limit was used in calculations.

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Hydrometrics, Inc. 07/28/20

TABLE 3. SUMMARY OF FLAGGED DATA
CITY OF HELENA
DATE RANGE: 06/01/2008 - 06/30/2008

SITE CODE	SAMPLE NUMBER	LAB NUMBER	SAMPLE DATE	PARAMETERS	RESULT	FLAGS	EXCEEDANCE TYPE
HL-99-3	HL-0806-120	8060394010	06/19/08	CHLOROFORM	0.0023	UJ1	BLANK
HL-99-2	HL-0806-121	8060394011	06/19/08	CHLOROFORM	0.0016	UJ1	BLANK
HL-99-1	HL-0806-122	8060394012	06/19/08	CHLOROFORM	0.0033	UJ1	BLANK

NOTES: All quantities in mg/L (Water) or mg/kg (Soil) unless noted. RPD: Relative Percent Difference.

>PRDL: QC Values within +/- Contract Detection Limit (+/- 2 times CRDL for Soil) for values <5 times Contract Detection Limit.

FLAGS: A: Anomalous, UJ1: Blank, J2: Standard, J3: Holding Time, J4D: Duplicate Exceedance, J4K: Spike Exceedance, J4S: Split Exceedance,

J5: QC Omission, R: Rejected, T: Frequency Violation. U: In front of flag less than detection limit.

APPENDIX 2

DATABASE

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Page	Slide Code	Slide Name	Slide Type	Elevation (ft)	Well Depth
9	5	250 Center Ave - N. Collins	Private Well		
9	16	2 West Court - Wade Dickinson	Private Well		
9	40	2509 Oakwood - E. Hartman	Private Well		
9	48	208 W. Center Ave - C. Backus	Private Well		
9	50	Travler Ct. Center & St. Andrew Dr. - Hartman	Private Well		
9	57	212 Dunbar Ave - G. Francis	Monitoring Wells		
9	62	76 Dunbar Ave - T. Harris	Private Well		
1	SPN-1	SPN-1	Monitoring Wells	1942.18	25
1	EL-94-1	EL-94-1 (REPLACED WELL 90-6)	Monitoring Wells		
1	EL-90-1	EL-90-1	Monitoring Wells	1942.48	66.3
1	EL-90-2	EL-90-2	Monitoring Wells	1938.96	68
1	EL-90-3	EL-90-3	Monitoring Wells	1938.28	73
5	EL-94-4	EL-94-4	Monitoring Wells	1936.04	
5	EL-94-2	EL-94-2	Monitoring Wells		
5	EL-94-3	EL-94-3	Monitoring Wells		
5	EL-99-1	EL-99-1	Monitoring Wells		
5	EL-99-2	EL-99-2	Monitoring Wells		
5	EL-99-3	EL-99-3	Monitoring Wells		
5	D-4	D-4	Monitoring Wells	1923.7	
1	IMP. GALLERY	IMP. GALLERY	Drainage Well	1948.89	
7	MPC-1	MPC-1 (was MPC-EL-1)	Monitoring Wells	1946.18	
7	MPC-2	MPC-2 (was MPC-EL-2)	Monitoring Wells	1946.18	
7	MPC-5	MPC-5	Monitoring Wells		
11	SLURRY WALL	SLURRY WALL	Quality Control		
11	TRIP FLARE	TRIP FLARE	Quality Control		

CH221 - City of Helena - ANALYSIS SUMMARY REPORT - This report was prepared by CH221 for the City of Helena. The data presented in this report was obtained from the City of Helena's records. CH221 is not responsible for the accuracy or completeness of the data presented in this report. The data presented in this report is for informational purposes only and should not be used for any other purpose.

Sample Type: Irrigation Well

SITE CODE	INF. GALLERY
SAMPLE DATE	06/17/2008
SAMPLE TIME	09:15
LAB	EL
LAB NUMBER	8060389002
SAMPLE NUMBER	HL-0806-101

-- PHYSICAL PARAMETERS --

PH (FLD)	7.27
SC (UMHOS/CM AT 25 C) (FLD)	232.0
WATER TEMPERATURE (C) (FLD)	10.9

-- VOLATILE ORGANICS --

1,1,1,2-TETRACHLOROETHANE	<0.001
1,1,1-TRICHLOROETHANE	<0.001
1,1,2,2-TETRACHLOROETHANE	<0.001
1,1,2-TRICHLOROETHANE	<0.001
1,1-DICHLOROETHANE	<0.001
1,1-DICHLOROETHENE	<0.001
1,2-DIBROMOETHANE	<0.001
1,2-DICHLOROETHANE	<0.001
1,2-DICHLOROPROPANE	<0.001
2-HEXANONE	<0.02
ACETONE	<0.02
ACRYLONITRILE	<0.02
BENZENE	<0.001
BROMOCHLOROMETHANE	<0.001
BROMODICHLOROMETHANE	<0.001
BROMOFORM	<0.001
BROMOMETHANE	<0.001
CARBON DISULFIDE	<0.001
CARBON TETRACHLORIDE	<0.001
CHLOROBENZENE	<0.001
CHLORODIBROMOMETHANE	<0.001
CHLOROETHANE	<0.001
CHLOROFORM	<0.001
CHLOROMETHANE	<0.001
CIS-1,2-DICHLOROETHENE	<0.001
CIS-1,3-DICHLOROPROPENE	<0.001
DIBROMOMETHANE	<0.001
DICHLORODIFLUOROMETHANE	<0.001
ETHYLBENZENE	<0.001
IODOMETHANE	<0.001
TOTAL XYLENE	<0.001
M-P XYLENE	<0.001
O-XYLENE	<0.001
METHYL ETHYL KETONE	<0.02
METHYL ISOBUTYL KETONE	<0.02
METHYLENE CHLORIDE	<0.001
STYRENE	<0.001
TETRACHLOROETHENE	<0.001
TOLUENE	<0.001
TRANS-1,2-DICHLOROETHENE	<0.001
TRANS-1,3-DICHLOROPROPENE	<0.001
TRICHLOROETHENE	<0.001
TRICHLOROFUOROMETHANE	<0.001
VINYL ACETATE	<0.001
VINYL CHLORIDE	<0.001

-- SEMI-VOLATILE EXTRACTABLES --

1,2,3-TRICHLOROPROPANE	<0.001
------------------------	--------

NOTES: All results in mg/L (Water) or mg/kg (Soil) unless noted and are laboratory (LAB) unless field (FLD) or calculated (CALC)
TOT:Total; DIS:Dissolved; TRC:Total Recoverable; E:Estimated; <:Less Than Detect. Blank: parameter not tested
Validation Flags: A:Anomalous; U1:Blank; J2,UJ2: Standard; J3:Hold Time; J4,UJ4:Duplicate, Spike, or Split Exceedance;
R:Rejected.

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Sample Type: Irrigation Well

SITE CODE INF. GALLERY
SAMPLE DATE 06/17/2008
SAMPLE TIME 09:15
LAB EL
LAB NUMBER 8060389002
SAMPLE NUMBER HL-0806-101

-- SEMI-VOLATILE EXTRACTABLES --

1,2-DIBROMO-3-CHLOROPROPANE <0.001
1,2-DICHLOROBENZENE <0.001
TRANS-1,4-DICHLORO-2-BUTENE <0.001
1,4-DICHLOROBENZENE <0.001

NOTES: All results in mg/L (Water) or mg/kg (Soil) unless noted and are laboratory (LAB) unless field (FLD) or calculated (CALC)
TOT:Total; DIS:Dissolved; TRC:Total Recoverable; E:Estimated; <:Less Than Detect. Blank: parameter not tested
Validation Flags: A:Anomalous; UJ1:Blank; J2,UJ2: Standard; J3:Hold Time; J4,UJ4:Duplicate, Spike, or Split Exceedance;
R:Rejected.

Sample Type: Monitoring Wells

SITE CODE	57	EPA-1	HL-06-1	HL-90-1	HL-90-2	HL-90-3	HL-90-3
SAMPLE DATE	06/17/2008	06/17/2008	06/17/2008	06/18/2008	06/19/2008	06/18/2008	06/18/2008
SAMPLE TIME	12:50	14:00	13:25	14:15	12:00	11:15	11:30
LAB	EL	EL	EL	EL	EL	EL	EL
LAB NUMBER	8060389004	8060394003	8060394002	8060389011	8060394013	8060394006	8060394007
REMARKS							DUPLICATE
SAMPLE NUMBER	HL-0806-106	HL-0806-108	HL-0806-107	HL-0806-102	HL-0806-103	HL-0806-114	HL-0806-115
-- PHYSICAL PARAMETERS --							
DEPTH TO WATER LEVEL (FEET)		48.0	19.06	58.39	50.71	65.52	
PH (FLD)	8.08	7.66	7.7	8.12	7.76	8.18	
PH		6.9	7.0		7.7	7.4	7.4
SC (UMHOS/CM AT 25 C)		1370.0	1040.0		673.0	1090.0	1100.0
SC (UMHOS/CM AT 25 C) (FLD)	1447.0	1356.0	1053.0	929.0	731.0	1043.0	
WATER TEMPERATURE (C) (FLD)	12.1	11.9	13.6	14.1	10.3	11.9	
-- MAJOR CONSTITUENTS --							
SULFATE (SO4)		130.0	86.0		51.0	170.0	170.0
CHLORIDE (CL)		92.0	26.0		33.0	55.0	55.0
-- NUTRIENTS --							
NITRATE + NITRITE AS N		3.68	0.81		0.73	9.8	9.6
-- METALS & MINOR CONSTITUENTS --							
ANTIMONY (SB) DIS		<0.005	<0.005		<0.005	<0.005	<0.005
ARSENIC (AS) DIS		<0.005	<0.005		<0.005	<0.005	<0.005
BARIUM (BA) DIS		<0.1	<0.1		<0.1	<0.1	<0.1
BERYLLIUM (BE) DIS		<0.001	<0.001		<0.001	<0.001	<0.001
CADMIUM (CD) DIS		<0.001	<0.001		<0.001	<0.001	<0.001
CHROMIUM (CR) DIS		<0.01	<0.01		<0.01	<0.01	<0.01
COBALT (CO) DIS		<0.01	<0.01		<0.01	<0.01	<0.01
COPPER (CU) DIS		<0.01	<0.01		<0.01	<0.01	<0.01
IRON (FE) DIS		0.03	<0.03		<0.01	<0.01	<0.01
LEAD (PB) DIS		<0.01	<0.01		<0.01	<0.01	<0.01
MERCURY (HG) DIS		<0.001	<0.001		<0.001	<0.001	<0.001
NICKEL (NI) DIS		0.02	<0.01		<0.01	<0.01	<0.01
SELENIUM (SE) DIS		<0.005	<0.005		<0.005	<0.005	<0.005
SILVER (AG) DIS		<0.005	<0.005		<0.005	<0.005	<0.005
THALLIUM (TL) DIS		<0.005	<0.005		<0.005	<0.005	<0.005
VANADIUM (V) DIS		<0.1	<0.1		<0.1	<0.1	<0.1
ZINC (ZN) DIS		<0.01	<0.01		<0.01	<0.01	<0.01
-- VOLATILE ORGANICS --							
1,1,1,2-TETRACHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,1-TRICHLOROETHANE	<0.001	<0.001	0.0042	<0.001	<0.001	<0.001	<0.001
1,1,2,2-TETRACHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2-TRICHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1-DICHLOROETHANE	<0.001	<0.001	<0.001	0.0012	<0.001	<0.001	<0.001
1,1-DICHLOROETHENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-DIBROMOETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-DICHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-DICHLOROPROPANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2-HEXANONE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
ACETONE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
ACRYLONITRILE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
BENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BROMOCHLOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BROMODICHLOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BROMOFORM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BROMOMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CARBON DISULFIDE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

NOTES: All results in mg/L (Water) or mg/kg (Soil) unless noted and are laboratory (LAB) unless field (FLD) or calculated (CALC)
 TOT:Total; DIS:Dissolved; TRC:Total Recoverable; E:Estimated; <:Less Than Detect. Blank: parameter not tested
 Validation Flags: A:Anomalous; UJ1:Blank; J2,UJ2: Standard; J3:Hold Time; J4,UJ4:Duplicate, Spike, or Split Exceedance;
 R:Rejected.

Sample Type: Monitoring Wells

SITE CODE	57	EPA-1	HL-06-1	HL-90-1	HL-90-2	HL-90-3	HL-90-3
SAMPLE DATE	06/17/2008	06/17/2008	06/17/2008	06/18/2008	06/19/2008	06/18/2008	06/18/2008
SAMPLE TIME	12:50	14:00	13:25	14:15	12:00	11:15	11:30
LAB	EL	EL	EL	EL	EL	EL	EL
LAB NUMBER	8060389004	8060394003	8060394002	8060389011	8060394013	8060394006	8060394007
REMARKS							DUPLICATE
SAMPLE NUMBER	HL-0806-106	HL-0806-108	HL-0806-107	HL-0806-102	HL-0806-103	HL-0806-114	HL-0806-115
-- VOLATILE ORGANICS --							
CARBON TETRACHLORIDE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CHLOROBENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CHLORODIBROMOMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CHLOROFORM	0.0032	<0.001	<0.001	0.0012	<0.001	0.0095	0.0098
CHLOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CIS-1,2-DICHLOROETHENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CIS-1,3-DICHLOROPROPENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DIBROMOMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DICHLORODIFLUOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
ETHYLBENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
IODOMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TOTAL XYLENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
M-P XYLENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
O-XYLENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
METHYL ETHYL KETONE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
METHYL ISOBUTYL KETONE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
METHYLENE CHLORIDE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
STYRENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TETRACHLOROETHENE	0.0017	0.0015	<0.001	0.0039	<0.001	<0.001	<0.001
TOLUENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TRANS-1,2-DICHLOROETHENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TRANS-1,3-DICHLOROPROPENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TRICHLOROETHENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TRICHLOROFLUOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
VINYL ACETATE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
VINYL CHLORIDE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
-- SEMI-VOLATILE EXTRACTABLES --							
1,2,3-TRICHLOROPROPANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-DIBROMO-3-CHLOROPROPANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-DICHLOROBENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TRANS-1,4-DICHLORO-2-BUTENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,4-DICHLOROBENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
-- OTHER PARAMETERS --							
CYANIDE (CN) TOT		<0.005	<0.005		<0.005	<0.005	<0.005
CHEMICAL OXYGEN DEMAND		<1.0	<1.0		<1.0	<1.0	<1.0

NOTES: All results in mg/L (Water) or mg/kg (Soil) unless noted and are laboratory (LAB) unless field (FLD) or calculated (CALC)
 TOT:Total; DIS:Dissolved; TRC:Total Recoverable; E:Estimated; <:Less Than Detect. Blank: parameter not tested
 Validation Flags: A:Anomalous; UJ1:Blank; J2,UJ2: Standard; J3:Hold Time; J4,UJ4:Duplicate, Spike, or Split Exceedance;
 R:Rejected.

Sample Type: Monitoring Wells

SITE CODE	HL-94-1	HL-94-2	HL-94-3	HL-99-1	HL-99-2	HL-99-3	I-4
SAMPLE DATE	06/18/2008	06/17/2008	06/18/2008	06/19/2008	06/19/2008	06/19/2008	06/18/2008
SAMPLE TIME	13:10	11:00	08:30	09:30	09:00	08:30	14:00
LAB	EL	EL	EL	EL	EL	EL	EL
LAB NUMBER	8060394008	8060394001	8060394004	8060394012	8060394011	8060394010	8060389008
SAMPLE NUMBER	HL-0806-116	HL-0806-104	HL-0806-109	HL-0806-122	HL-0806-121	HL-0806-120	HL-0806-118
-- PHYSICAL PARAMETERS --							
DEPTH TO WATER LEVEL (FEET)	59.3	25.76	36.64	75.5	89.09	75.3	
PH (FLD)	8.14	7.6	8.03	6.93	7.09	7.23	7.99
PH	7.5	7.6	7.6	7.3	7.5	7.5	
SC (UMHOS/CM AT 25 C)	902.0	955.0	890.0	1110.0	807.0	881.0	
SC (UMHOS/CM AT 25 C) (FLD)	981.0	923.0	805.0	1089.0	808.0	960.0	1038.0
WATER TEMPERATURE (C) (FLD)	12.1	10.8	11.6	14.2	13.4	13.9	14.9
-- MAJOR CONSTITUENTS --							
SULFATE (SO4)	98.0	60.0	160.0	170.0	120.0	160.0	
CHLORIDE (CL)	23.0	65.0	79.0	71.0	43.0	50.0	
-- NUTRIENTS --							
NITRATE + NITRITE AS N	3.75	3.81	11.1	9.3	6.75	8.9	
-- METALS & MINOR CONSTITUENTS --							
ANTIMONY (SB) DIS	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
ARSENIC (AS) DIS	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	
BARIUM (BA) DIS	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
BERYLLIUM (BE) DIS	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
CADMIUM (CD) DIS	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
CHROMIUM (CR) DIS	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
COBALT (CO) DIS	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
COPPER (CU) DIS	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
IRON (FE) DIS	<0.03	<0.03	0.07	<0.03	<0.03	<0.03	
LEAD (PB) DIS	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
MERCURY (HG) DIS	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
NICKEL (NI) DIS	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
SELENIUM (SE) DIS	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
SILVER (AG) DIS	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
THALLIUM (TL) DIS	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
VANADIUM (V) DIS	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
ZINC (ZN) DIS	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
-- VOLATILE ORGANICS --							
1,1,1,2-TETRACHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,1-TRICHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-TETRACHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2-TRICHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1-DICHLOROETHANE	<0.001	<0.001	<0.001	<0.001	0.0012	0.0026	0.0011
1,1-DICHLOROETHENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-DIBROMOETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-DICHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-DICHLOROPROPANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2-HEXANONE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
ACETONE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
ACRYLONITRILE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
BENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BROMOCHLOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BROMODICHLOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BROMOFORM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BROMOMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CARBON DISULFIDE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CARBON TETRACHLORIDE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

NOTES: All results in mg/L (Water) or mg/kg (Soil) unless noted and are laboratory (LAB) unless field (FLD) or calculated (CALC)
TOT: Total; DIS: Dissolved; TRC: Total Recoverable; E: Estimated; <: Less Than Detect. Blank: parameter not tested

Validation Flags: A: Anomalous; UJ1: Blank; J2, UJ2: Standard; J3: Hold Time; J4, UJ4: Duplicate, Spike, or Split Exceedance;
R: Rejected.

Sample Type: Monitoring Wells

SITE CODE	HL-94-1	HL-94-2	HL-94-3	HL-99-1	HL-99-2	HL-99-3	I-4
SAMPLE DATE	06/18/2008	06/17/2008	06/18/2008	06/19/2008	06/19/2008	06/19/2008	06/18/2008
SAMPLE TIME	13:10	11:00	08:30	09:30	09:00	08:30	14:00
LAB	EL	EL	EL	EL	EL	EL	EL
LAB NUMBER	8060394008	8060394001	8060394004	8060394012	8060394011	8060394010	8060389008
SAMPLE NUMBER	HL-0806-116	HL-0806-104	HL-0806-109	HL-0806-122	HL-0806-121	HL-0806-120	HL-0806-118

-- VOLATILE ORGANICS --

CHLOROBENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CHLORODIBROMOMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CHLOROFORM	0.0063	<0.001	0.013	0.0033	0.0016	0.0023	0.0014
				UJ1	UJ1	UJ1	
CHLOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CIS-1,2-DICHLOROETHENE	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001
CIS-1,3-DICHLOROPROPENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DIBROMOMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DICHLORODIFLUOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	0.0017	<0.001
ETHYLBENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
IODOMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TOTAL XYLENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
M-P XYLENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
O-XYLENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
METHYL ETHYL KETONE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
METHYL ISOBUTYL KETONE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
METHYLENE CHLORIDE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
STYRENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TETRACHLOROETHENE	<0.001	<0.001	<0.001	0.0039	0.0033	0.006	0.0042
TOLUENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TRANS-1,2-DICHLOROETHENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TRANS-1,3-DICHLOROPROPENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TRICHLOROETHENE	<0.001	<0.001	<0.001	<0.001	<0.001	0.0012	<0.001
TRICHLOROFUOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
VINYL ACETATE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
VINYL CHLORIDE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

-- SEMI-VOLATILE EXTRACTABLES --

1,2,3-TRICHLOROPROPANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-DIBROMO-3-CHLOROPROPANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-DICHLOROBENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TRANS-1,4-DICHLORO-2-BUTENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,4-DICHLOROBENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

-- OTHER PARAMETERS --

CYANIDE (CN) TOT	<0.005	<0.005	0.01	<0.005	0.013	0.038	
CHEMICAL OXYGEN DEMAND	<1.0	19.0	<1.0	<1.0	<1.0	<1.0	

NOTES: All results in mg/L (Water) or mg/kg (Soil) unless noted and are laboratory (LAB) unless field (FLD) or calculated (CALC)
 TOT: Total; DIS: Dissolved; TRC: Total Recoverable; R: Estimated; <: Less Than Detect. Blank: parameter not tested
 Validation Flags: A: Anomalous; UJ1: Blank; J2, UJ2: Standard; J3: Hold Time; J4, UJ4: Duplicate, Spike, or Split Exceedance;
 R: Rejected.

Sample Type: Monitoring Wells

SITE CODE	MPC-1	MPC-2	MPC-5
SAMPLE DATE	06/18/2008	06/17/2008	06/18/2008
SAMPLE TIME	09:45	09:00	15:15
LAB	EL	EL	EL
LAB NUMBER	8060394005	8060389001	8060394009
SAMPLE NUMBER	HL-0806-112	HL-0806-100	HL-0806-117
-- PHYSICAL PARAMETERS --			
DEPTH TO WATER LEVEL (FEET)	23.44	17.43	57.3
PH (FLD)	8.07	6.8	8.08
PH	7.4		7.5
SC (UMHOS/CM AT 25 C)	987.0		3720.0
SC (UMHOS/CM AT 25 C) (FLD)	884.0	843.0	4418.0
WATER TEMPERATURE (C) (FLD)	10.9	9.7	13.5
-- MAJOR CONSTITUENTS --			
SULFATE (SO4)	190.0		1000.0
CHLORIDE (CL)	61.0		31.0
-- NUTRIENTS --			
NITRATE + NITRITE AS N	11.8		18.8
-- METALS & MINOR CONSTITUENTS --			
ANTIMONY (SB) DIS	<0.005		<0.005
ARSENIC (AS) DIS	<0.005		0.037
BARIUM (BA) DIS	<0.1		<0.1
BERYLLIUM (BE) DIS	<0.001		<0.001
CADMIUM (CD) DIS	<0.001		<0.001
CHROMIUM (CR) DIS	<0.01		<0.01
COBALT (CO) DIS	<0.01		0.02
COPPER (CU) DIS	<0.01		0.02
IRON (FE) DIS	<0.03		2.62
LEAD (PB) DIS	<0.01		<0.01
MERCURY (HG) DIS	<0.001		<0.001
NICKEL (NI) DIS	<0.01		0.05
SELENIUM (SE) DIS	<0.005		<0.005
SILVER (AG) DIS	<0.005		<0.005
THALLIUM (TL) DIS	<0.005		<0.005
VANADIUM (V) DIS	<0.1		0.5
ZINC (ZN) DIS	<0.01		<0.01
-- VOLATILE ORGANICS --			
1,1,1,2-TETRACHLOROETHANE	<0.001	<0.001	<0.001
1,1,1-TRICHLOROETHANE	<0.001	<0.001	<0.001
1,1,2,2-TETRACHLOROETHANE	<0.001	<0.001	<0.001
1,1,2-TRICHLOROETHANE	<0.001	<0.001	<0.001
1,1-DICHLOROETHANE	0.002	<0.001	<0.001
1,1-DICHLOROETHENE	<0.001	<0.001	<0.001
1,2-DIBROMOETHANE	<0.001	<0.001	<0.001
1,2-DICHLOROETHANE	<0.001	<0.001	<0.001
1,2-DICHLOROPROPANE	<0.001	<0.001	<0.001
2-HEXANONE	<0.02	<0.02	<0.02
ACETONE	<0.02	<0.02	<0.02
ACRYLONITRILE	<0.02	<0.02	<0.02
BENZENE	<0.001	<0.001	<0.001
BROMOCHLOROMETHANE	<0.001	<0.001	<0.001
BROMODICHLOROMETHANE	<0.001	<0.001	<0.001
BROMOFORM	<0.001	<0.001	<0.001
BROMOMETHANE	<0.001	<0.001	<0.001
CARBON DISULFIDE	<0.001	<0.001	<0.001
CARBON TETRACHLORIDE	<0.001	<0.001	<0.001

NOTES: All results in mg/L (Water) or mg/kg (Soil) unless noted and are laboratory (LAB) unless field (FLD) or calculated (CALC)
 TOT: Total; DIS: Dissolved; TRC: Total Recoverable; E: Estimated; <: Less Than Detect. Blank: parameter not tested
 Validation Flags: A: Anomalous; UJ1: Blank; J2, UJ2: Standard; J3: Hold Time; J4, UJ4: Duplicate, Spike, or Split Exceedance;
 R: Rejected.

Sample Type: Monitoring Wells

SITE CODE	MPC-1	MPC-2	MPC-5
SAMPLE DATE	06/18/2008	06/17/2008	06/18/2008
SAMPLE TIME	09:45	09:00	15:15
LAB	EL	EL	EL
LAB NUMBER	8060394005	8060389001	8060394009
SAMPLE NUMBER	HL-0806-112	HL-0806-100	HL-0806-117

-- VOLATILE ORGANICS --

CHLOROBENZENE	<0.001	<0.001	<0.001
CHLORODIBROMOMETHANE	<0.001	<0.001	<0.001
CHLOROETHANE	<0.001	<0.001	<0.001
CHLOROFORM	0.0018	<0.001	<0.001
CHLOROMETHANE	<0.001	<0.001	<0.001
CIS-1,2-DICHLOROETHENE	0.0012	<0.001	<0.001
CIS-1,3-DICHLOROPROPENE	<0.001	<0.001	<0.001
DIBROMOMETHANE	<0.001	<0.001	<0.001
DICHLORODIFLUOROMETHANE	<0.001	<0.001	<0.001
ETHYLBENZENE	<0.001	<0.001	<0.001
IODOMETHANE	<0.001	<0.001	<0.001
TOTAL XYLENE	<0.001	<0.001	<0.001
M-P XYLENE	<0.001	<0.001	<0.001
O-XYLENE	<0.001	<0.001	<0.001
METHYL ETHYL KETONE	<0.02	<0.02	<0.02
METHYL ISOBUTYL KETONE	<0.02	<0.02	<0.02
METHYLENE CHLORIDE	<0.001	<0.001	<0.001
STYRENE	<0.001	<0.001	<0.001
TETRACHLOROETHENE	0.0062	<0.001	<0.001
TOLUENE	<0.001	<0.001	<0.001
TRANS-1,2-DICHLOROETHENE	<0.001	<0.001	<0.001
TRANS-1,3-DICHLOROPROPENE	<0.001	<0.001	<0.001
TRICHLOROETHENE	0.0016	<0.001	<0.001
TRICHLOROFLUOROMETHANE	<0.001	<0.001	<0.001
VINYL ACETATE	<0.001	<0.001	<0.001
VINYL CHLORIDE	<0.001	<0.001	<0.001

-- SEMI-VOLATILE EXTRACTABLES --

1,2,3-TRICHLOROPROPANE	<0.001	<0.001	<0.001
1,2-DIBROMO-3-CHLOROPROPANE	<0.001	<0.001	<0.001
1,2-DICHLOROBENZENE	<0.001	<0.001	<0.001
TRANS-1,4-DICHLORO-2-BUTENE	<0.001	<0.001	<0.001
1,4-DICHLOROBENZENE	<0.001	<0.001	<0.001

-- OTHER PARAMETERS --

CYANIDE (CN) TOT	0.036		10.6
CHEMICAL OXYGEN DEMAND	<1.0		54.0

NOTES: All results in mg/L (Water) or mg/kg (Soil) unless noted and are laboratory (LAB) unless field (FLD) or calculated (CALC)
 TOT:Total; DIS:Dissolved; TRC:Total Recoverable; E:Estimated; <:Less Than Detect. Blank: parameter not tested
 Validation Flags: A:Anomalous; UJ1:Blank; J2,UJ2: Standard; J3:Hold Time; J4,UJ4:Duplicate, Spike, or Split Exceedance;
 R:Rejected.

Sample Type: Private Well

	SITE CODE	5	16	40	48	52	62
SAMPLE DATE	06/18/2008	06/18/2008	06/18/2008	06/18/2008	06/17/2008	06/19/2008	
SAMPLE TIME	14:10	10:00	08:45	09:15	12:30	09:45	
LAB	EL	EL	EL	EL	EL	EL	
LAB NUMBER	8060389009	8060389007	8060389005	8060389006	8060389003	8060389010	
SAMPLE NUMBER	HL-0806-119	HL-0806-113	HL-0806-110	HL-0806-111	HL-0806-105	HL-0806-123	

-- PHYSICAL PARAMETERS --

PH (FLD)	7.95	8.02	8.0	7.9	7.94	7.39
SC (UMHOS/CM AT 25 C) (FLD)	1126.0	1089.0	979.0	1032.0	1223.0	903.0
WATER TEMPERATURE (C) (FLD)	13.1	10.5	12.0	12.5	13.5	10.4

-- VOLATILE ORGANICS --

1,1,1,2-TETRACHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,1-TRICHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-TETRACHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2-TRICHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1-DICHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,1-DICHLOROETHENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-DIBROMOETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-DICHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-DICHLOROPROPANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2-HEXANONE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
ACETONE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
ACRYLONITRILE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
BENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BROMOCHLOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BROMODICHLOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BROMOFORM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BROMOMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CARBON DISULFIDE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CARBON TETRACHLORIDE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CHLOROBENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CHLORODIBROMOMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CHLOROETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CHLOROFORM	0.0023	0.0016	0.0036	0.0038	0.0044	<0.001
CHLOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CIS-1,2-DICHLOROETHENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
CIS-1,3-DICHLOROPROPENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DIBROMOMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
DICHLORODIFLUOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
ETHYLBENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
IODOMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TOTAL XYLENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
M-P XYLENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
O-XYLENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
METHYL ETHYL KETONE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
METHYL ISOBUTYL KETONE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
METHYLENE CHLORIDE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
STYRENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TETRACHLOROETHENE	0.004	0.0015	0.0026	0.0023	0.0024	<0.001
TOLUENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TRANS-1,2-DICHLOROETHENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TRANS-1,3-DICHLOROPROPENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TRICHLOROETHENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TRICHLOROFUOROMETHANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
VINYL ACETATE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
VINYL CHLORIDE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

-- SEMI-VOLATILE EXTRACTABLES --

1,2,3-TRICHLOROPROPANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
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NOTES: All results in mg/L (Water) or mg/kg (Soil) unless noted and are laboratory (LAB) unless field (FLD) or calculated (CALC)
 TOT:Total; DIS:Dissolved; TRC:Total Recoverable; E:Estimated; <:Less Than Detect. Blank: parameter not tested
 Validation flags: A:Anomalous; UJ1:Blank; J2,UJ2: Standard; J3:Hold Time; J4,UJ4:Duplicate, Spike, or Split Exceedance;
 R:Rejected.

Sample Type: Private Well

SITE CODE	5	16	40	48	52	62
SAMPLE DATE	06/18/2008	06/18/2008	06/18/2008	06/18/2008	06/17/2008	06/19/2008
SAMPLE TIME	14:10	10:00	08:45	09:15	12:30	09:45
LAB	EL	EL	EL	EL	EL	EL
LAB NUMBER	8060389009	8060389007	8060389005	8060389006	8060389003	8060389010
SAMPLE NUMBER	HL-0806-119	HL-0806-113	HL-0806-110	HL-0806-111	HL-0806-105	HL-0806-123

-- SEMI-VOLATILE EXTRACTABLES --

1,2-DIBROMO-3-CHLOROPROPANE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-DICHLOROBENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TRANS-1,4-DICHLORO-2-BUTENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1,4-DICHLOROBENZENE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

NOTES: All results in mg/L (Water) or mg/kg (Soil) unless noted and are laboratory (LAB) unless field (FLD) or calculated (CALC)
 TOT:Total; DIS:Dissolved; TRC:Total Recoverable; E:Estimated; <:Less Than Detect. Blank: parameter not tested
 Validation Flags: A:Anomalous; UJ1:Blank; J2,UJ2: Standard; J3:Hold Time; J4,UJ4:Duplicate, Spike, or Split Exceedance;
 R:Rejected.

Sample Type: Quality Control

SITE CODE	RINSBLANK	TRIPBLANK
SAMPLE DATE	06/19/2008	06/17/2008
SAMPLE TIME	10:30	11:00
LAB	EL	EL
LAB NUMBER	8060394014	8060394015
REMARKS	BLANK	BLANK
SAMPLE NUMBER	HL-0806-124	HL-0806-125

-- PHYSICAL PARAMETERS --

PH	5.8
SC (UMHOS/CM AT 25 C)	2.0

-- MAJOR CONSTITUENTS --

SULFATE (SO4)	<1.0
CHLORIDE (CL)	<1.0

-- NUTRIENTS --

NITRATE + NITRITE AS N	<0.05
------------------------	-------

-- METALS & MINOR CONSTITUENTS --

ANTIMONY (SB) DIS	<0.005
ARSENIC (AS) DIS	<0.005
BARIUM (BA) DIS	<0.1
BERYLLIUM (BE) DIS	<0.001
CADMIUM (CD) DIS	<0.001
CHROMIUM (CR) DIS	<0.01
COBALT (CO) DIS	<0.01
COPPER (CU) DIS	<0.01
IRON (FE) DIS	<0.03
LEAD (PB) DIS	<0.01
MERCURY (HG) DIS	<0.001
NICKEL (NI) DIS	<0.01
SELENIUM (SE) DIS	<0.005
SILVER (AG) DIS	<0.005
THALLIUM (TL) DIS	<0.005
VANADIUM (V) DIS	<0.1
ZINC (ZN) DIS	<0.01

-- VOLATILE ORGANICS --

1,1,1,2-TETRACHLOROETHANE	<0.001	<0.001
1,1,1-TRICHLOROETHANE	<0.001	<0.001
1,1,2,2-TETRACHLOROETHANE	<0.001	<0.001
1,1,2-TRICHLOROETHANE	<0.001	<0.001
1,1-DICHLOROETHANE	<0.001	<0.001
1,1-DICHLOROETHENE	<0.001	<0.001
1,2-DIBROMOETHANE	<0.001	<0.001
1,2-DICHLOROETHANE	<0.001	<0.001
1,2-DICHLOROPROPANE	<0.001	<0.001
2-HEXANONE	<0.02	<0.02
ACETONE	<0.02	<0.02
ACRYLONITRILE	<0.02	<0.02
BENZENE	<0.001	<0.001
BROMOCHLOROMETHANE	<0.001	<0.001
BROMODICHLOROMETHANE	0.005	<0.001
BROMOFORM	<0.001	<0.001
BROMOMETHANE	<0.001	<0.001
CARBON DISULFIDE	<0.001	<0.001
CARBON TETRACHLORIDE	<0.001	<0.001
CHLOROETHANE	<0.001	<0.001
CHLOROBENZENE	<0.001	<0.001
CHLORODIBROMOMETHANE	0.001	<0.001
CHLOROETHANE	<0.001	<0.001

NOTES: All results in mg/L (Water) or mg/kg (Soil) unless noted and are laboratory (LAB) unless field (FLD) or calculated (CALC)
 TOT: Total; DIS: Dissolved; TRC: Total Recoverable; E: Estimated; <: Less Than Detect. Blank: parameter not tested
 Validation Flags: A: Anomalous; UJ1: Blank; J2, UJ2: Standard; J3: Hold Time; J4, UJ4: Duplicate, Spike, or Split Exceedance;
 R: Rejected.

Sample Type: Quality Control

SITE CODE	RINSBLANK	TRIPBLANK
SAMPLE DATE	06/19/2008	06/17/2008
SAMPLE TIME	10:30	11:00
LAB	EL	EL
LAB NUMBER	8060394014	8060394015
REMARKS	BLANK	BLANK
SAMPLE NUMBER	HL-0806-124	HL-0806-125

-- VOLATILE ORGANICS --

CHLOROFORM	0.011	<0.001
CHLOROMETHANE	<0.001	<0.001
CIS-1,2-DICHLOROETHENE	<0.001	<0.001
CIS-1,3-DICHLOROPROPENE	<0.001	<0.001
DIBROMOMETHANE	<0.001	<0.001
DICHLORODIFLUOROMETHANE	<0.001	<0.001
ETHYLBENZENE	<0.001	<0.001
IODOMETHANE	<0.001	<0.001
TOTAL XYLENE	<0.001	<0.001
M-P XYLENE	<0.001	<0.001
O-XYLENE	<0.001	<0.001
METHYL ETHYL KETONE	<0.02	<0.02
METHYL ISOBUTYL KETONE	<0.02	<0.02
METHYLENE CHLORIDE	<0.001	<0.001
STYRENE	<0.001	<0.001
TETRACHLOROETHENE	<0.001	<0.001
TOLUENE	<0.001	<0.001
TRANS-1,2-DICHLOROETHENE	<0.001	<0.001
TRANS-1,3-DICHLOROPROPENE	<0.001	<0.001
TRICHLOROETHENE	<0.001	<0.001
TRICHLOROFLUOROMETHANE	<0.001	<0.001
VINYL ACETATE	<0.001	<0.001
VINYL CHLORIDE	<0.001	<0.001

-- SEMI-VOLATILE EXTRACTABLES --

1,2,3-TRICHLOROPROPANE	<0.001	<0.001
1,2-DIBROMO-3-CHLOROPROPANE	<0.001	<0.001
1,2-DICHLOROBENZENE	<0.001	<0.001
TRANS-1,4-DICHLORO-2-BUTENE	<0.001	<0.001
1,4-DICHLOROBENZENE	<0.001	<0.001

-- OTHER PARAMETERS --

CYANIDE (CN) TOT	<0.005
CHEMICAL OXYGEN DEMAND	<1.0

NOTES: All results in mg/L (Water) or mg/kg (Soil) unless noted and are laboratory (LAB) unless field (FLD) or calculated (CALC)
TOT:Total; DIS:Dissolved; TRC:Total Recoverable; E:Estimated; <:Less Than Detect. Blank: parameter not tested
Validation Flags: A:Anomalous; UJ1:Blank; J2,UJ2: Standard; J3:Hold Time; J4,U4:Duplicate, Spike, or Split Exceedance;
R:Rejected.

INDEX

+-----+ SAMPLE NUMBER ORDER +-----+					+-----+ LAB NUMBER ORDER +-----+				
Page	Sample Number	Lab ##	Date	Site Code	Page	Lab ##	Sample Number	Date	Site Code
7	HL-0806-100	8060389001	06/17/2008MPC-2		7	8060389001	HL-0806-100	06/17/2008MPC-2	
1	HL-0806-101	8060389002	06/17/2008INF. GALLERY		1	8060389002	HL-0806-101	06/17/2008INF. GALLERY	
3	HL-0806-102	8060389011	06/18/2008HL-90-1		9	8060389003	HL-0806-105	06/17/200852	
3	HL-0806-103	8060394013	06/19/2008HL-90-2		3	8060389004	HL-0806-106	06/17/200857	
5	HL-0806-104	8060394001	06/17/2008HL-94-2		9	8060389005	HL-0806-110	06/18/200840	
9	HL-0806-105	8060389003	06/17/200852		9	8060389006	HL-0806-111	06/18/200848	
3	HL-0806-106	8060389004	06/17/200857		9	8060389007	HL-0806-113	06/18/200816	
3	HL-0806-107	8060394002	06/17/2008HL-06-1		5	8060389008	HL-0806-118	06/18/2008I-4	
3	HL-0806-108	8060394003	06/17/2008EPA-1		9	8060389009	HL-0806-119	06/18/20085	
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9	HL-0806-110	8060389005	06/18/200840		3	8060389011	HL-0806-102	06/18/2008HL-90-1	
9	HL-0806-111	8060389006	06/18/200848		5	8060394001	HL-0806-104	06/17/2008HL-94-2	
7	HL-0806-112	8060394005	06/18/2008MPC-1		3	8060394002	HL-0806-107	06/17/2008HL-06-1	
9	HL-0806-113	8060389007	06/18/200816		3	8060394003	HL-0806-108	06/17/2008EPA-1	
3	HL-0806-114	8060394006	06/18/2008HL-90-3		5	8060394004	HL-0806-109	06/18/2008HL-94-3	
3	HL-0806-115	8060394007	06/18/2008HL-90-3		7	8060394005	HL-0806-112	06/18/2008MPC-1	
5	HL-0806-116	8060394008	06/18/2008HL-94-1		3	8060394006	HL-0806-114	06/18/2008HL-90-3	
7	HL-0806-117	8060394009	06/18/2008MPC-5		3	8060394007	HL-0806-115	06/18/2008HL-90-3	
5	HL-0806-118	8060389008	06/18/2008I-4		5	8060394008	HL-0806-116	06/18/2008HL-94-1	
9	HL-0806-119	8060389009	06/18/20085		7	8060394009	HL-0806-117	06/18/2008MPC-5	
5	HL-0806-120	8060394010	06/19/2008HL-99-3		5	8060394010	HL-0806-120	06/19/2008HL-99-3	
5	HL-0806-121	8060394011	06/19/2008HL-99-2		5	8060394011	HL-0806-121	06/19/2008HL-99-2	
5	HL-0806-122	8060394012	06/19/2008HL-99-1		5	8060394012	HL-0806-122	06/19/2008HL-99-1	
9	HL-0806-123	8060389010	06/19/200862		3	8060394013	HL-0806-103	06/19/2008HL-90-2	
11	HL-0806-124	8060394014	06/19/2008RINSBLANK		11	8060394014	HL-0806-124	06/19/2008RINSBLANK	
11	HL-0806-125	8060394015	06/17/2008TRIPBLANK		11	8060394015	HL-0806-125	06/17/2008TRIPBLANK	

APPENDIX 3

HYDROMETRICS FIELD NOTES

HF-FORM-430

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R. Lane
 Laboratory Used: Energy Labs

Site Designation: MPC-2
 Sample Code Number: HL-0806-100
 Sample Date: 6/17/08
 Sample Time: 0900 (military)

*If Duplicate Sample Collected,
Please Record Below*

Duplicate Sample Code #: /
 Duplicate Sample Time: /

Site Conditions

New Site: Yes ☐ No ☒ Photo taken: Yes ☐ No ☒
 Site Type: DRY surface water process water
☒ monitoring well domestic well adit seep

spring other: _____

Weather Conditions: calm breeze windy
no precip. rain snow
clear p. cloudy overcast

Air Temperature: _____ °C 65 °FFor Groundwater Samples

well volume
 formula: $V = (TD-SWL) \times (\text{Dia.}^2)$ 25 Comments

TD (ft.): 35.5 Pumping Rate: _____ gpmSWL (ft.): 17.43 no access/pumpingCasing Diameter (I.D.): 2"Water Volume (V) (gal): 3 $V \times 3 = (\text{gal})$ 9MP Description: Top of PVCActual Vol. Removed (gal.): 10Water Level Recovery: slow moderate rapidFor Surface Water Samples

Flow Method: Marsh McBriney Volumetric Flame Weir Estimate

Other Flow or Description: _____

Flow: _____ gpm cfs Staff Gage: _____

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
<u>0900</u>			<u>6.80</u>	<u>843</u>		<u>9.7</u>	

Turbidity: clear moderate
 (circle) slight very

Sample Method: grab composite pump bailer other
 (describe)

Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	<u>6.80</u>	
SC (µmhos/cm)	<u>843</u>	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	<u>9.7</u>	
Color	<u>None</u>	
Other; odor	<u>None</u>	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
<u>2</u>	<u>40mL</u>	<u>UF</u>	<u>HCL</u>	<u>VOC</u>	
<u>1</u>	<u>L</u>	<u>UF</u>	<u>RAW</u>	<u>Commons</u>	
<u>1</u>	<u>250</u>	<u>F</u>	<u>HNO3</u>	<u>Dis Metals</u>	
<u>1</u>	<u>250</u>	<u>UF</u>	<u>H2SO4</u>	<u>Nut</u>	
<u>1</u>	<u>500</u>	<u>UF</u>	<u>NaOH3</u>	<u>CN</u>	

Comments: _____

Sample Team Member Signature: _____ Page _____ of _____

STANDARD OPERATING PROCEDURE
WATER SAMPLING FORM

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R, Lane
 Laboratory Used: Energy Labs

HF-FORM-430

Site Designation: Infiltration Gallery
 Sample Code Number: HL-0806-101
 Sample Date: 6/17/08
 Sample Time: 0915 (military)

For Groundwater Samples

If Duplicate Sample Collected,
Please Record Below

Duplicate Sample Code #:
 Duplicate Sample Time:

Site Conditions

New Site: Yes ☐ No ☒ Photo taken: Yes ☐ No ☒
 Site Type: DRY surface water process water
monitoring well domestic well adit seep

spring other:

Weather Conditions: calm breeze windy
no precip. rain snow
clear p. cloudy overcast

Air Temperature: °C 65 °F

well volume formula: $V = (TD-SWL) \times (Dia.^2)$	25	Comments
TD (ft.)	Pumping Rate	gpm
SWL (ft.)	no access/pumping	
Casing Diameter (I.D.)		
Water Volume (V) (gal):	$V \times 3 = (gal)$	
MP Description		
Actual Vol. Removed (gal.)		
Water Level Recovery:	slow moderate rapid	

For Surface Water Samples

Flow Method:	<u>Marsh McBirney</u>	<u>Volumetric</u>	<u>Flume</u>	<u>Weir</u>	<u>Estimate</u>
Other Flow or Description:					
Flow:	gpm	cfs	Staff Gage:		

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
<u>0915</u>			<u>7.27</u>	<u>232</u>		<u>10.9</u>	

Turbidity: clear moderate
 (circle) slight very

Sample Method: grab composite pump gailer other
 (describe) 2" Disp. Bitten

Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	<u>7.27</u>	
SC (µmhos/cm)	<u>232</u>	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	<u>10.9</u>	
Color	<u>None</u>	
Other; odor	<u>None</u>	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments:

Sample Team Member Signature:

Page of

STANDARD OPERATING PROCEDURE
WATER SAMPLING FORM

HF-FORM-430

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R, Lane
 Laboratory Used: Energy Labs

Site Designation: HL-90-1
 Sample Code Number: HL-0806-102
 Sample Date: 6/18/08
 Sample Time: 14:15 (military)

For Groundwater Samples

If Duplicate Sample Collected,
Please Record Below

Duplicate Sample Code #: _____
 Duplicate Sample Time: _____

Site Conditions

New Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐
 Site Type: DRY surface water process water

monitoring well domestic well adit seep

spring other: _____

Weather Conditions: calm breeze windy
no precip. rain snow
clear p. cloudy overcast

Air Temperature: _____ °C 70 °F

well volume formula: $V = (TD-SWL) \times (\text{Dia.}^2)$	25	Comments
TD (ft.) <u>60</u>	Pumping Rate _____ gpm	
SWL (ft.) <u>58.39</u>	no access/pumping	
Casing Diameter (I.D.) <u>4"</u>		
Water Volume (V) (gal): <u>1</u>	$V \times 3 = (\text{gal})$ <u>3</u>	
MP Description <u>Top of PVC</u>		
Actual Vol. Removed (gal.) <u>3</u>		
Water Level Recovery: <u>slow</u>	moderate rapid	

For Surface Water Samples

Flow Method: <u>Marsh McBirney</u>	<u>Volumetric</u>	<u>Flume</u>	<u>Weir</u>	<u>Estimate</u>
Other Flow or Description: _____				
Flow: _____ gpm	_____ cfs	Staff Gage: _____		

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (μmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
<u>1415</u>			<u>8.12</u>	<u>929</u>		<u>14.1</u>	

Turbidity: clear moderate
 (circle) slight very

Sample Method: grab composite pump bailer other
 (describe) 2" Disp Bailer

Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	<u>8.12</u>	
SC (μmhos/cm)	<u>929</u>	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	<u>14.1</u>	
Color	<u>None</u>	
Other; odor	<u>None</u>	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
<u>2</u>	<u>40mL</u>	<u>UF</u>	<u>HCL</u>	<u>VOC</u>	
<u>1</u>	<u>L</u>	<u>UF</u>	<u>RAW</u>	<u>Commons</u>	
<u>1</u>	<u>250</u>	<u>F</u>	<u>HNO3</u>	<u>Dis Metals</u>	
<u>1</u>	<u>250</u>	<u>UF</u>	<u>H2SO4</u>	<u>Nut</u>	
<u>1</u>	<u>500</u>	<u>UF</u>	<u>NaOH3</u>	<u>CN</u>	

Comments: Purged and Let Recover Before Sampling VOCs Only

Sample Team Member Signature: Rick Z

Page _____ of _____

HF-FORM-430

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R, Lane
 Laboratory Used: Energy Labs

Site Designation: HL-90-2
 Sample Code Number: HL-0806-103
 Sample Date: 6/17/08
 Sample Time: 1200 (military)

For Groundwater Samples

If Duplicate Sample Collected,
Please Record Below

Duplicate Sample Code #:
 Duplicate Sample Time:

Site Conditions

New Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐
 Site Type: DRY surface water process water
☒ monitoring well domestic well adit seep

spring other:

Weather Conditions: calm breeze windy
no precip. rain snow
clear p. cloudy overcast

Air Temperature: 75 °F

well volume formula: $V = (TD-SWL) \times (Dia^2)$	25	Comments
TD (ft.) <u>68</u>	Pumping Rate <u> </u> gpm	
SWL (ft.) <u>50.71</u>	no access/pumping	
Casing Diameter (I.D.) <u>4"</u>		
Water Volume (V) (gal): <u>11</u>	V x 3 = (gal) <u>33</u>	
MP Description <u>Trip PVC</u>		
Actual Vol. Removed (gal.) <u>35</u>		
Water Level Recovery: <u>slow</u> moderate rapid		

For Surface Water SamplesFlow Method: Marsh McBirney Volumetric Plume Weir EstimateOther Flow or Description: Flow: gpm cfs Staff Gage: Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (μmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
<u>1200</u>			<u>7.76</u>	<u>731</u>		<u>10.3</u>	

Turbidity: clear moderate
 (circle) slight very

Sample Method: grab composite pump bailer other
 (describe) brand frs

Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	<u>7.76</u>	
SC (μmhos/cm)	<u>731</u>	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	<u>10.3</u>	
Color	<u>None</u>	
Other; odor	<u>None</u>	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
<u>2</u>	<u>40mL</u>	<u>UF</u>	<u>HCL</u>	<u>VOC</u>	
<u>1</u>	<u>L</u>	<u>UF</u>	<u>RAW</u>	<u>Commons</u>	
<u>1</u>	<u>250</u>	<u>F</u>	<u>HNO3</u>	<u>Dis Metals</u>	
<u>1</u>	<u>250</u>	<u>UF</u>	<u>H2SO4</u>	<u>Nut</u>	
<u>1</u>	<u>500</u>	<u>UF</u>	<u>NaOH3</u>	<u>CN</u>	

Comments: Sample Team Member Signature: Ruth ZPage of

STANDARD OPERATING PROCEDURE
WATER SAMPLING FORM

HF-FORM-430

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R, Lane
 Laboratory Used: Energy Labs

Site Designation: HL-94-2
 Sample Code Number: HL-0806-104
 Sample Date: 6/17/08
 Sample Time: 11:00 (military)

For Groundwater Samples

If Duplicate Sample Collected,
Please Record Below

Duplicate Sample Code #: _____
 Duplicate Sample Time: _____

Site Conditions

New Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐
 Site Type: DRY surface water process water

monitoring well domestic well adit seep

spring other: _____

Weather Conditions: calm breeze windy
no precip. rain snow
clear p. cloudy overcast

Air Temperature: _____ °C 70 °F

well volume formula: $V = (TD-SWL) \times (\text{Dia.})^2$	25	Comments
TD (ft.) <u>41</u>	Pumping Rate _____	gpm
SWL (ft.) <u>25.76</u>	no access/pumping	
Casing Diameter (I.D.) <u>2"</u>		
Water Volume (V) (gal): <u>2.4</u>	$V \times 3 = (\text{gal})$	<u>7.2</u>
MP Description <u>Top of PVL</u>		
Actual Vol. Removed (gal.) <u>80</u>		
Water Level Recovery: slow <u>moderate</u> rapid		

For Surface Water Samples

Flow Method: Marsh McBirney Volumetric Flume Weir Estimate
 Other Flow or Description: _____
 Flow: _____ gpm _____ cfs Staff Gauge: _____

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (μmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
<u>11:00</u>			<u>7.60</u>	<u>923</u>		<u>10.8</u>	

Turbidity: clear moderate slight very

Sample Method: grab composite pump bailler other
 (describe) 12v

Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	<u>7.60</u>	
SC (μmhos/cm)	<u>923</u>	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	<u>10.8</u>	
Color	<u>NONE</u>	
Other; odor	<u>NONE</u>	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments: _____

Sample Team Member Signature: Rick

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HF-FORM-430

Project Name: City of HelenaProject Code: 1273Sample Team Member(s): R. LaneLaboratory Used: Energy LabsSite Designation: Res #52Sample Code Number: HL-0806-105Sample Date: 6/17/08Sample Time: 12:30 (military)For Groundwater Samples

well volume formula: $V = (TD-SWL) \times (Dia.^2)$	25	Comments
TD (ft.):	Pumping Rate	gpm
SW- (ft.):	no access/pumping	
Casing Diameter (I.D.):		
Water Volume (V) (gal):	$V \times 3 = (gal)$	
MP Description:		
Actual Vol. Removed (gal.):		
Water Level Recovery:	slow moderate rapid	

If Duplicate Sample Collected,
Please Record Below

Duplicate Sample Code #: 1Duplicate Sample Time: 1Site ConditionsNew Site: Yes ☐ No ☒ Photo taken: Yes ☐ No ☒

Site Type: DRY surface water process water

monitoring well domestic well adit seep

spring other: _____

Weather Conditions: calm breeze windyno precip. rain snowclear p. cloudy overcastAir Temperature: _____ °C 75 °FFor Surface Water SamplesFlow Method: Marsh McBirney Volumetric Flume Weir Estimate

Other Flow or Description: _____

Flow: gpm cfs Staff Gage: _____

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
1230			7.94	1223		13.5	

Turbidity: clear slight moderate verySample Method: grab composite pump bailer otherField Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	7.94	
SC (µmhos/cm)	1223	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	13.5	
Color	None	
Other; odor	None	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments: _____

Sample Team Member Signature: R. Lane

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STANDARD OPERATING PROCEDURE
WATER SAMPLING FORM

HF-FORM-430

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R. Lane
 Laboratory Used: Energy Labs

Site Designation: Res #57
 Sample Code Number: HL-0806-106
 Sample Date: 6/17/08
 Sample Time: 12:50 (military)

*If Duplicate Sample Collected,
Please Record Below*

Duplicate Sample Code #:
 Duplicate Sample Time:

Site Conditions

New Site: Yes ☐ No ☒ Photo taken: Yes ☐ No ☒
 Site Type: DRY surface well process water
monitoring well domestic well adit seep
 spring other:

Weather Conditions: calm breeze windy
no precip. rain snow
clear p. cloudy overcast
 Air Temperature: °C 75 °F

For Groundwater Samples

well volume formula: $V = (TD-SWL) \times (\text{Dia.}^2)$	25	Comments
TD (ft.)	Pumping Rate	gpm
SWL (ft.)		no access/pumping
Casing Diameter (I.D.)		
Water Volume (V) (gal):	V x 3 = (gal)	
MP Description		
Actual Vol. Removed (gal.)		
Water Level Recovery	slow moderate rapid	

For Surface Water Samples

Flow Method: Marsh McBirney Volumetric Flume Weir Estimate
 Other Flow or Description:
 Flow: gpm cfs Staff Gage:

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
12:50			8.08	1447		12.1	

Turbidity: clear moderate
 (circle) slight very

Sample Method: grab composite pump bailer other
 (describe)

Field Parameters

Sample	Duplicate
ORP (mV)	
DO (mg/l)	
pH	8.08
SC (µmhos/cm)	1447
Turbidity (ntu)	
H ₂ O Tmp. (°C)	12.1
Color	None
Other; odor	None

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments:

Sample Team Member Signature: R. Lane

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STANDARD OPERATING PROCEDURE
WATER SAMPLING FORM

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R. Lane
 Laboratory Used: Energy Labs

HF-FORM-430

Site Designation: HL-06-1
 Sample Code Number: HL-0806-107
 Sample Date: 6/17/08
 Sample Time: 1325 (military)

*If Duplicate Sample Collected,
Please Record Below*

Duplicate Sample Code #:
 Duplicate Sample Time:

Site Conditions

New Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐
 Site Type: DRY surface water process water
☒ monitoring well domestic well adit seep
 spring other:

Weather Conditions: calm breeze windy
no precip. rain snow
clear p. cloudy overcast

Air Temperature: 80 °C 80 °F

For Groundwater Samples

well volume formula: $V = (TD-SWL) \times (Dia.^2)$	25	Comments
TD (ft.) <u>26.5</u>	Pumping Rate <u> </u> gpm	
SWL (ft.) <u>19.06</u>	no access/pumping	
Casing Diameter (I.D.) <u>2"</u>		
Water Volume (V) (gal): <u>1</u>	V x 3 = (gal) <u>3</u>	
MP Description <u>Top of PVC</u>		
Actual Vol. Removed (gal.) <u>6</u>		
Water Level Recovery: <u>slow</u> moderate rapid		

For Surface Water Samples

Flow Method: <u>Marsh McBirney</u> Volumetric Flume Weir Estimate
Other Flow or Description: <u> </u>
Flow: <u>gpm</u> cfs Staff Gage: <u> </u>

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
<u>1325</u>			<u>7.70</u>	<u>1053</u>		<u>13.6</u>	

Turbidity: clear slight moderate very

Sample Method: grab composite pump bailer other
 (describe) 120

Field Parameters

Sample	Duplicate
ORP (mV)	
DO (mg/l)	
pH	<u>7.70</u>
SC (µmhos/cm)	<u>1053</u>
Turbidity (ntu)	
H ₂ O Tmp. (°C)	<u>13.6</u>
Color	<u>None</u>
Other; odor	<u>None</u>

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments:

Sample Team Member Signature: Rick Z

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STANDARD OPERATING PROCEDURE
WATER SAMPLING FORMConsulting Scientists,
Engineers and Contractors

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R. Lane
 Laboratory Used: Energy Labs

HF-FORM-430

Site Designation: EPA-1
 Sample Code Number: HL-0806-108
 Sample Date: 6/17/08
 Sample Time: 14:00 (military)

If Duplicate Sample Collected,
Please Record Below

Duplicate Sample Code #:
 Duplicate Sample Time:

Site Conditions

New Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐
 Site Type: DRY surface water process water
☒ monitoring well domestic well adit seep
 spring other:

Weather Conditions: calm breeze windy
no precip. rain snow
clear p. cloudy overcast
 Air Temperature: 80 °C 80 °F

For Groundwater Samples

well volume formula: $V = (TD-SWL) \times (\text{Dia.}^2)$	25	Comments
TD (ft.): <u>59</u>	Pumping Rate <u> </u> gpm	
SWL (ft): <u>48.0</u>	no access/pumping	
Casing Diameter (I.D.): <u>2"</u>		
Water Volume (V) (gal): <u>2</u>	$V \times 3 = (\text{gal})$ <u>6</u>	
MP Description <u>Top of PVC</u>		
Actual Vol. Removed (gal.) <u>6</u>		
Water Level Recovery: ☒ slow ☐ moderate ☐ rapid		

For Surface Water Samples

Flow Method: <u>Marsh McBirney</u> Volumetric Plume Weir Estimate
Other Flow or Description: <u> </u>
Flow: <u> </u> gpm <u> </u> cfs Staff Gage: <u> </u>

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
1400			7.66	1356		11.9	

Turbidity: clear ☒ moderate ☐
 slight very

Sample Method: ☒ grab composite ☒ pump ☒ bailer other

Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	7.66	
SC (µmhos/cm)	1356	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	11.9	
Color	None	
Other; odor	None	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments: Sample Team Member Signature: Rick ZPage of

STANDARD OPERATING PROCEDURE
WATER SAMPLING FORM

HF-FORM-430

Project Name: City of Helena

Project Code: 1273

Sample Team Member(s): R. Lane

Laboratory Used: Energy Labs

Site Designation: HL-941-3

Sample Code Number: HL-0806109

Sample Date: 6/18/08

Sample Time: 08:30 (military)

For Groundwater Samples

If Duplicate Sample Collected,
Please Record Below

Duplicate Sample Code #: /

Duplicate Sample Time: /

Site Conditions

New Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐

Site Type: DRY surface water process water

☒ monitoring well ☐ domestic well ☐ adit ☐ seep

spring other: /

Weather Conditions: ☒ calm ☐ breeze ☐ windy☒ no precip. ☐ rain ☐ snow☒ clear ☐ p. cloudy ☐ overcast

Air Temperature: °C 80 °F

well volume formula: $V = (TD-SWL) \times (\text{Dia.}^2)$	25	Comments
TD (ft.) 69	Pumping Rate	gpm
SWL (ft.) 36.64	no access/pumping	
Casing Diameter (I.D.) 2"		
Water Volume (V) (gal): 5	V x 3 = (gal)	15
MP Description	Top of PVC	
Actual Vol. Removed (gal.) 15		
Water Level Recovery: slow ☒ moderate ☐ rapid		

For Surface Water Samples

Flow Method: Marsh McBirney Volumetric Flume Weir Estimate

Other Flow or Description: /

Flow: gpm cfs Staff Gage: /

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
0830			8.03	805		11.6	

Turbidity: ☒ clear ☐ moderate slight ☐ verySample Method: ☒ grab ☐ composite ☒ pump ☒ bailer ☐ other

Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	8.03	
SC (µmhos/cm)	805	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	11.6	
Color	None	
Other; odor	None	

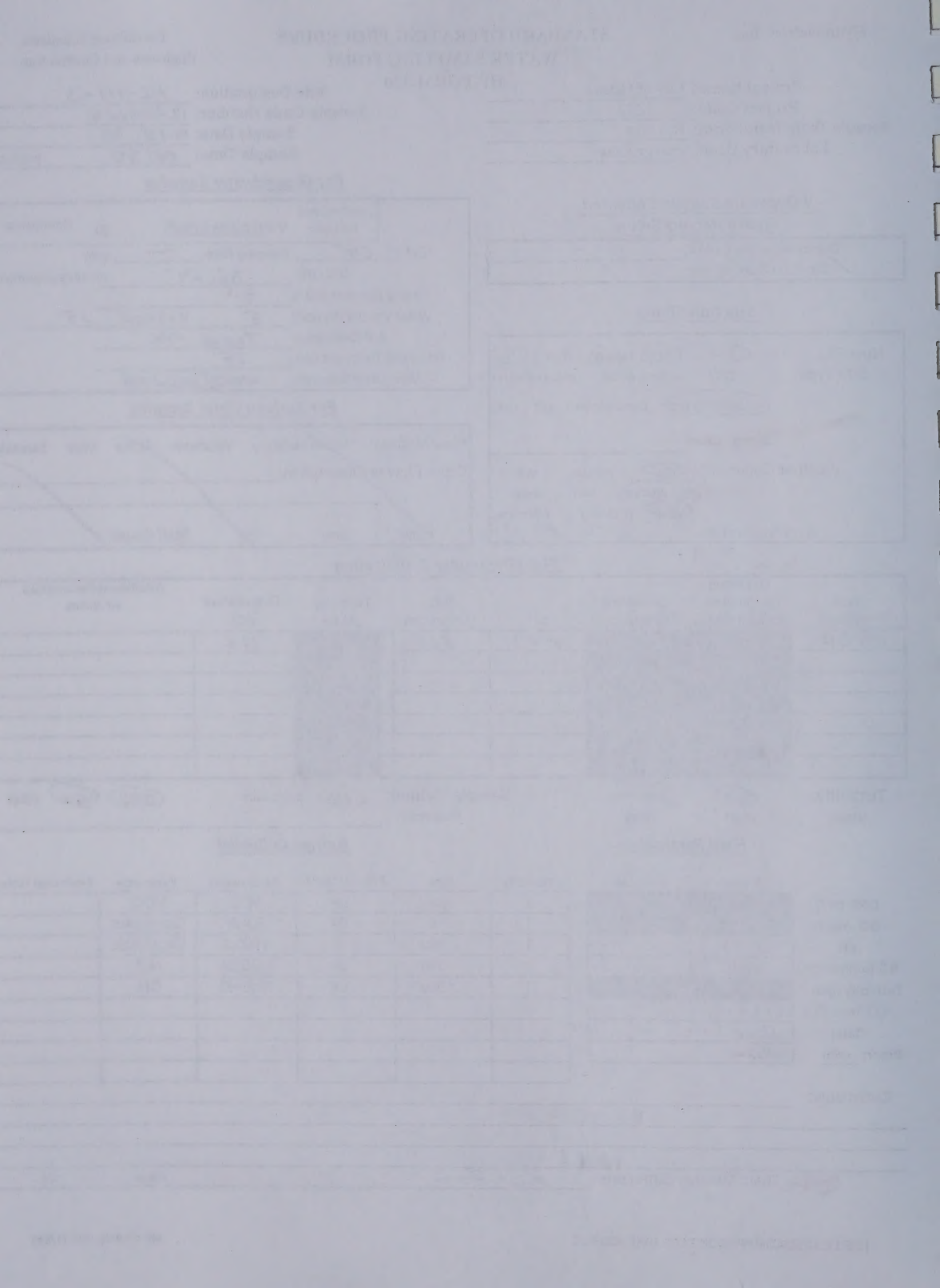
Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments: /

Sample Team Member Signature: R. Lane

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STANDARD OPERATING PROCEDURE
WATER SAMPLING FORMConsulting Scientists,
Engineers and Contractors

HF-FORM-430

Project Name: City of HelenaProject Code: 1273Sample Team Member(s): R. LaneLaboratory Used: Energy LabsSite Designation: Res #40Sample Code Number: HL-0806-110Sample Date: 6/19/08Sample Time: 08:45 (military)If Duplicate Sample Collected,
Please Record BelowDuplicate Sample Code #: Duplicate Sample Time: Site ConditionsNew Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐Site Type: DRY surface water process water☒ monitoring well domestic well adit seepspring other: Weather Conditions: ☒ calm breeze windy☒ no precip. rain snow☒ clear p. cloudy overcastAir Temperature: 75 °C 75 °FFor Groundwater Samples

well volume formula: $V = (TD-SWL) \times (Dia.^2)$		25	Comments
TD (ft.)	Pumping Rate	gpm	
SWL (ft.)			no access/pumping
Casing Diameter (I.D.)			
Water Volume (V) (gal)		V x 3 = (gal)	
MP Description			
Actual Vol. Removed (gal.)			
Water Level Recovery:	slow	moderate	rapid

For Surface Water Samples

Flow Method:	Marsh-McBirney	Volumetric	Flume	Weir	Estimate
Other Flow or Description:					
Flow:	gpm	cfs	Staff Gage:		

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
0845			8.00	979		17.0	

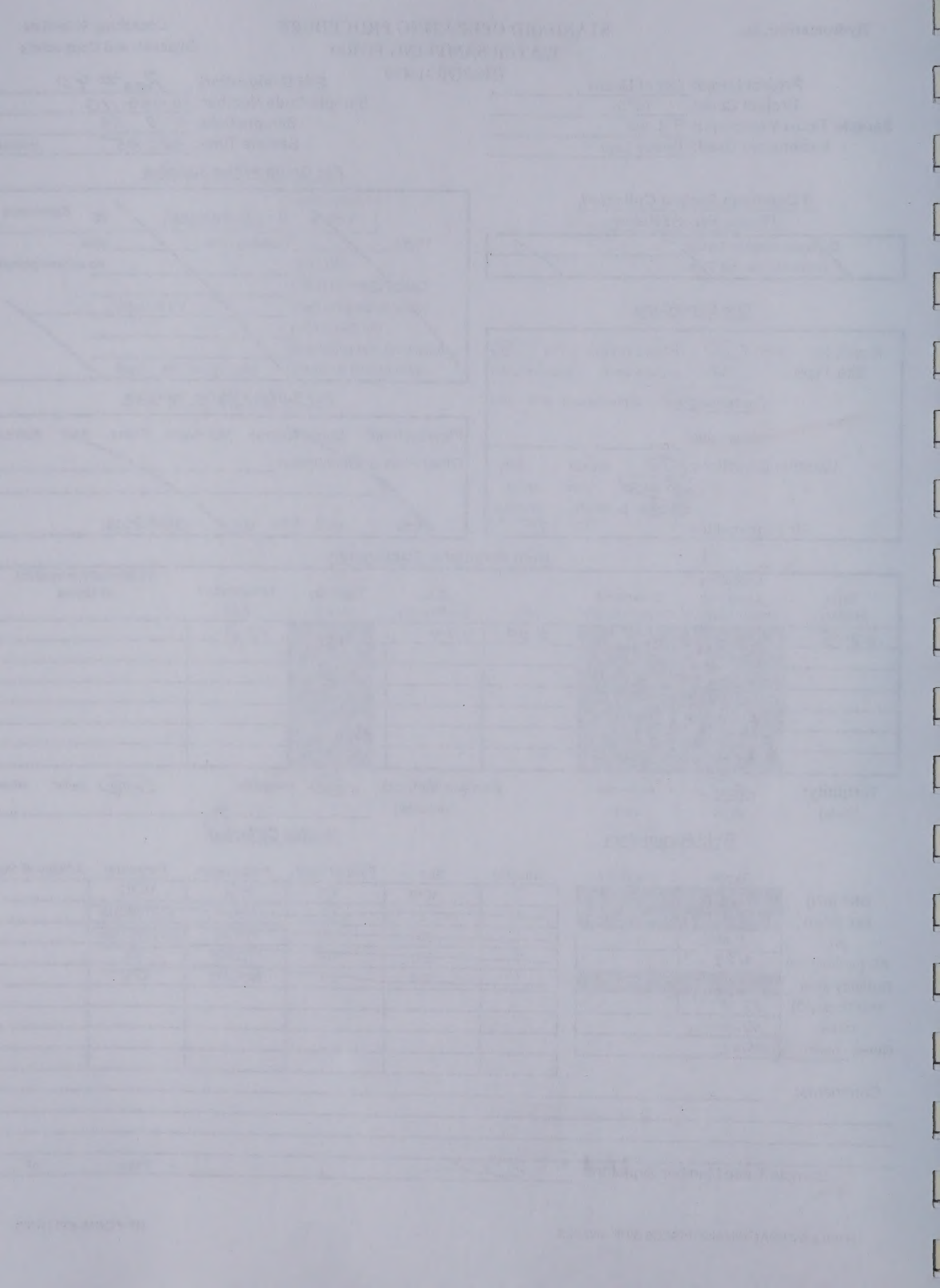
Turbidity: ☒ clear moderate
(circle) slight verySample Method: ☒ grab composite ☒ pump bailer other
(describe)Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	8.00	
SC (µmhos/cm)	979	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	17.0	
Color	None	
Other; odor	None	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments: Sample Team Member Signature: R. LanePage of



STANDARD OPERATING PROCEDURE
WATER SAMPLING FORMConsulting Scientists,
Engineers and Contractors

HF-FORM-430

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R. Lane
 Laboratory Used: Energy Labs

Site Designation: Res #48
 Sample Code Number: HL-0806-111
 Sample Date: 6/18/08
 Sample Time: 09:15 (military)

If Duplicate Sample Collected,
Please Record Below

Duplicate Sample Code #:
 Duplicate Sample Time:

Site Conditions

New Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐
 Site Type: DRY surface water process water

monitoring well domestic well adit seep
 spring other:

Weather Conditions: calm breeze windy
no precip. rain snow
clear p. cloudy overcast

Air Temperature: 75 °F

For Groundwater Samples

well volume formula: $V = (TD-SWL) \times (Dia.^2)$	25	Comments
TD (ft.)	Pumping Rate	gpm
SW (ft.)		no access/pumping
Casing Diameter (I.D.)		
Water Volume (V) (gal.)	$V \times 3 =$ (gal)	
MP Description		
Actual Vol. Removed (gal.)		
Water Level Recovery:	slow moderate rapid	

For Surface Water Samples

Flow Method:	Marsh McBirney	Volumetric	Flume	Weir	Estimate
Other Flow or Description:					
Flow:	gpm	ft/s	Staff Gage:		

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
0915			7.90	1032		12.5	

Turbidity: clear moderate
 (circle) slight very

Sample Method: grab composite pump bailer other
 (describe)

Field Parameters

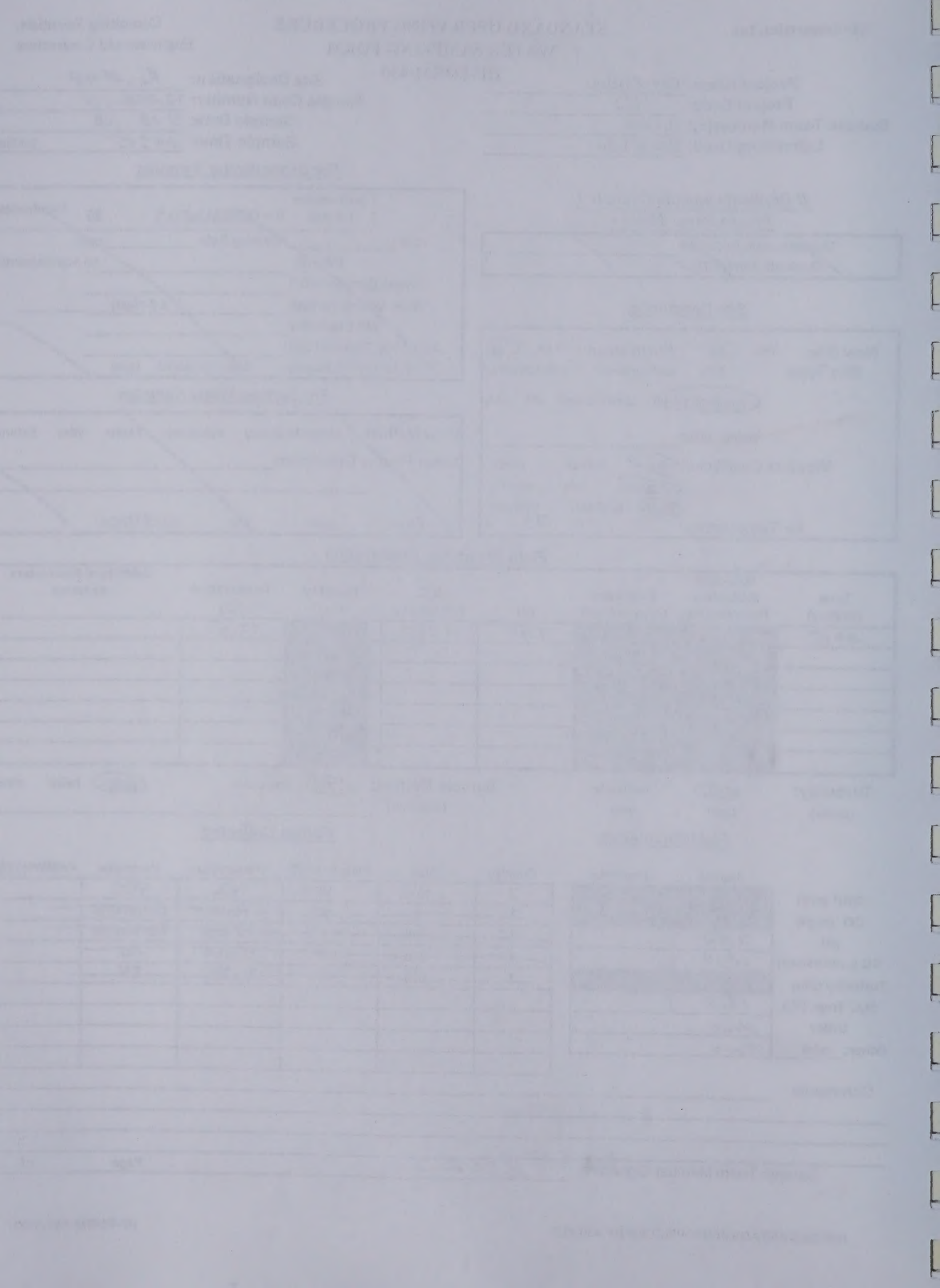
	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	7.90	
SC (µmhos/cm)	1032	
Turbidity (ntu)		
H ₂ O Temp. (°C)	12.5	
Color	None	
Other; odor	None	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments:

Sample Team Member Signature: Ruth Z Page of



STANDARD OPERATING PROCEDURE
WATER SAMPLING FORMConsulting Scientists,
Engineers and Contractors

HF-FORM-430

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R. Lane
 Laboratory Used: Energy Labs

Site Designation: MP-1
 Sample Code Number: HL-0806-112
 Sample Date: 6/13/08
 Sample Time: 09:45 (military)

For Groundwater Samples

If Duplicate Sample Collected,
Please Record Below

Duplicate Sample Code #: _____

Duplicate Sample Time: _____

Site Conditions

New Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐
 Site Type: DRY surface water process water
☒ monitoring well domestic well adit seep

spring other: _____

Weather Conditions: calm breeze windy
no precip. rain snow
clear p. cloudy overcast

Air Temperature: _____ °C 80 °F

well volume formula: $V = (TD-SWL) \times (Dia.^2)$	25	Comments
TD (ft.) <u>39</u>	Pumping Rate _____	gpm
SWL (ft.) <u>23.44</u>	no access/pumping	
Casing Diameter (I.D.) <u>2"</u>		
Water Volume (V) (gal.) <u>2.4</u>	V x 3 = (gal.) <u>7.5</u>	
MP Description <u>Top of PVC</u>		
Actual Vol. Removed (gal.) <u>8</u>		
Water Level Recovery: <u>slow</u>	moderate rapid	

For Surface Water Samples

Flow Method: <u>Marsh McBirney</u>	<u>Volumetric</u>	<u>Flume</u>	<u>Weir</u>	<u>Estimate</u>
Other Flow or Description: _____				
Flow: _____	gpm	cfs	Staff Gage: _____	

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
<u>0945</u>			<u>8.07</u>	<u>884</u>		<u>10.9</u>	

Turbidity: clear moderate
 (circle) slight very

Sample Method: grab composite pump bailer other
 (describe)

Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	<u>8.07</u>	
SC (µmhos/cm)	<u>884</u>	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	<u>10.9</u>	
Color	<u>None</u>	
Other; odor	<u>None</u>	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments: _____

Sample Team Member Signature: R. Lane

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STANDARD OPERATING PROCEDURE
WATER SAMPLING FORMConsulting Scientists,
Engineers and Contractors

HF-FORM-430

Project Name: City of HelenaProject Code: 1273Sample Team Member(s): R. LaneLaboratory Used: Energy LabsSite Designation: Res # 16Sample Code Number: HL-0806-113Sample Date: 6/18/08Sample Time: 10:00 (military)If Duplicate Sample Collected,
Please Record BelowDuplicate Sample Code #: Duplicate Sample Time: Site ConditionsNew Site: Yes ☐ No ☒ Photo taken: Yes ☐ No ☒Site Type: DRY surface water process watermonitoring well domestic well adit seepspring other: Weather Conditions: calm breeze windyno precip. rain snowclear p. cloudy overcastAir Temperature: 80 °C 80 °Fwell volume
formula: $V = (TD-SWL) \times (\text{Dia.}^2)$ 25 CommentsTD (ft.) Pumping Rate gpmSWL (ft.): no access/pumpingCasing Diameter (I.D.): Water Volume (V) (gal): V x 3 = (gal) MP Description Actual Vol. Removed (gal.) Water Level Recovery: slow moderate rapidFor Surface Water SamplesFlow Method: Marsh McBimney Volumetric Flume Weir EstimateOther Flow or Description: Flow: gpm cfs Staff Gage: Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
1000			8.02	1084		10.5	

Turbidity: clear moderate
(circle) slight verySample Method: grab composite pump bailer other
(describe)Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	8.02	
SC (µmhos/cm)	1084	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	10.5	
Color	None	
Other; odor	None	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	UF	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	GN	

Comments: Sample Team Member Signature: R. LanePage of

STANDARD OPERATING PROCEDURE
WATER SAMPLING FORM

HF-FORM-430

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R. Lane
 Laboratory Used: Energy Labs

Site Designation: HL-90-3
 Sample Code Number: HL-0806-114
 Sample Date: 6/18/08
 Sample Time: 11:15 (military)

If Duplicate Sample Collected,
Please Record Below

Duplicate Sample Code #: HL-0806-115
 Duplicate Sample Time: 1130

Site Conditions

New Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐
 Site Type: DRY surface water process water
☒ monitoring well domestic well adit seep
 spring other: _____

Weather Conditions: calm breeze windy
☒ no precip rain snow
☒ clear p. cloudy overcast
 Air Temperature: _____ °C 30 °F

For Groundwater Samples

well volume formula: $V = (TD-SWL) \times (Dia.^2)$	25	Comments
TD (ft.) <u>79</u>	Pumping Rate _____	gpm
SWL (ft.) <u>65.52</u>	no access/pumping	
Casing Diameter (I.D.) <u>4"</u>		
Water Volume (V) (gal): <u>9</u>	V x 3 = (gal)	<u>27</u>
MP Description <u>Top of PVC</u>		
Actual Vol. Removed (gal.) <u>30</u>		
Water Level Recovery: <u>slow</u>	moderate	rapid

For Surface Water Samples

Flow Method: <u>Marsh McBirney</u>	Volumetric	Flume	Weir	Estimate
Other Flow or Description: _____				
Flow: _____	gpm	gfs	Staff Gage: _____	

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
<u>11:15</u>			<u>8.18</u>	<u>1043</u>		<u>11.9</u>	

Turbidity: clear moderate
 (circle) slight very

Sample Method: grab composite pump bailer other
 (describe)

Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	<u>8.18</u>	
SC (µmhos/cm)	<u>1043</u>	
Turbidity (ntu)		
H ₂ O Temp. (°C)	<u>11.9</u>	
Color	<u>None</u>	
Other; odor	<u>None</u>	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
<u>4</u>	40mL	UF	HCL	VOC	
<u>2</u>	L	UF	RAW	Commons	
<u>2</u>	250	F	HNO3	Dis Metals	
<u>2</u>	250	UF	H2SO4	Nut	
<u>2</u>	500	UF	NaOH3	CN	

Comments: _____

Sample Team Member Signature: Rick Z

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STANDARD OPERATING PROCEDURE
WATER SAMPLING FORMConsulting Scientists,
Engineers and Contractors

HF-FORM-430

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R. Lane
 Laboratory Used: Energy Labs

Site Designation: HL-94-1
 Sample Code Number: HL-0806-116
 Sample Date: 6/18/08
 Sample Time: 13:10 (military)

If Duplicate Sample Collected,
Please Record Below

Duplicate Sample Code #:
 Duplicate Sample Time:

Site Conditions

New Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐
 Site Type: DRY surface water process water

monitoring well domestic well adit seep

spring other:

Weather Conditions: calm breeze windy
no precip. rain snow
clear p. cloudy overcast

Air Temperature: 85 °F

For Groundwater Samples

well volume formula: $V = (TD-SWL) \times (Dia.^2)$	25	Comments
TD (ft.): <u>88</u>	Pumping Rate <u> </u> gpm	
SWL (ft.): <u>59.30</u>	no access/pumping	
Casing Diameter (I.D.): <u>2"</u>		
Water Volume (V) (gal): <u>5</u>	V x 3 = (gal) <u>15</u>	
MP Description: <u>Top of PVC</u>		
Actual Vol. Removed (gal.): <u>15</u>		
Water Level Recovery: <u>slow</u> moderate rapid		

For Surface Water Samples

Flow Method: <u>Marsh McBirney</u> Volumetric Flume Weir Estimate
Other Flow or Description: <u> </u>
Flow: <u> </u> gpm <u> </u> cfs <u> </u> Staff Gage: <u> </u>

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (μmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
<u>1310</u>			<u>8.14</u>	<u>981</u>		<u>12.1</u>	

Turbidity: clear moderate
 (circle) slight very

Sample Method: grab composite pump bailer other
 (describe)

Field Parameters

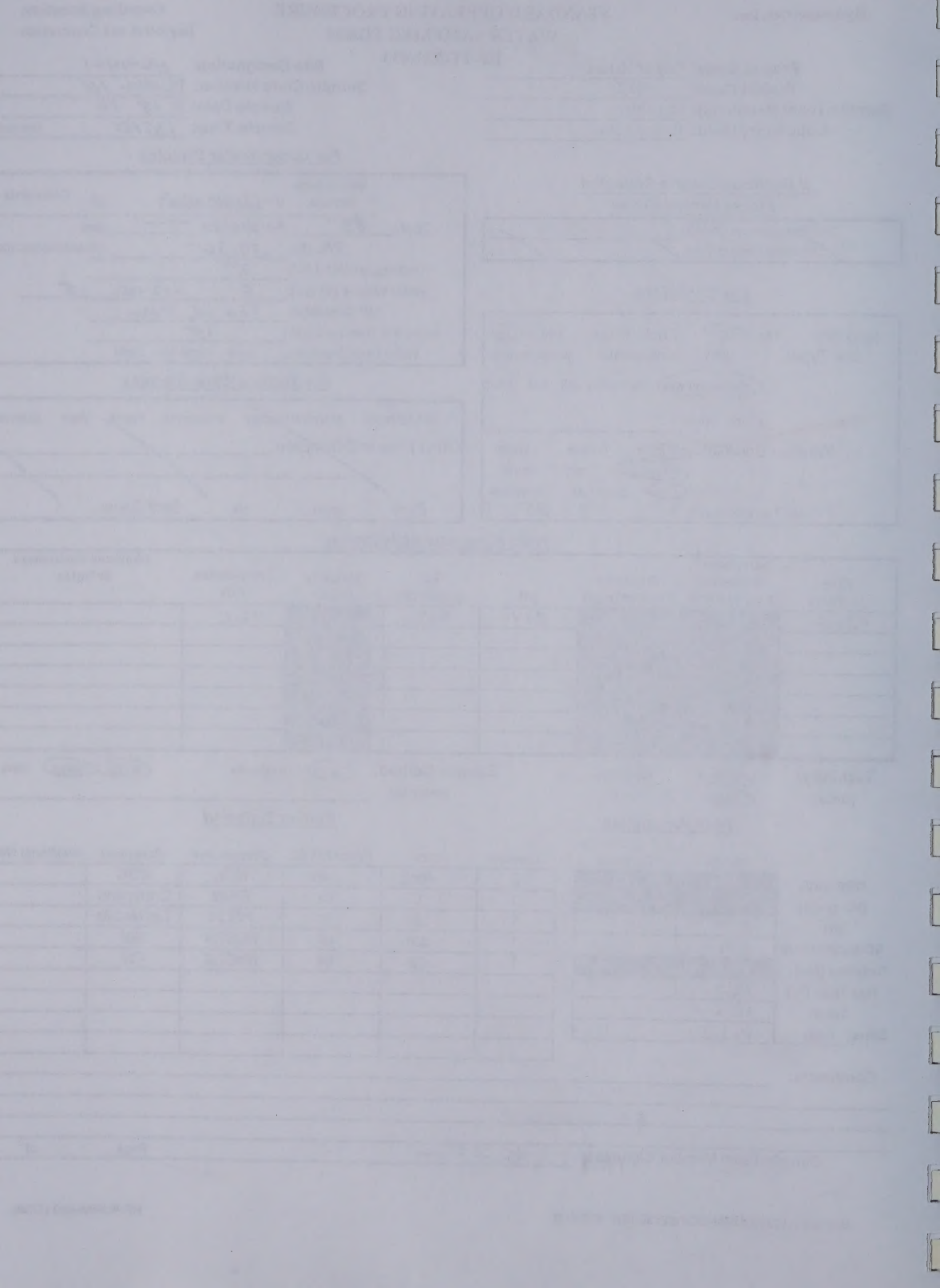
	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	<u>8.14</u>	
SC (μmhos/cm)	<u>981</u>	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	<u>12.1</u>	
Color	<u>None</u>	
Other; odor	<u>None</u>	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments:

Sample Team Member Signature: R. Lane Page of



STANDARD OPERATING PROCEDURE
WATER SAMPLING FORM

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R. Lane
 Laboratory Used: Energy Labs

HF-FORM-430

Site Designation: MPC-5
 Sample Code Number: HL-0806-117
 Sample Date: 6/18/08
 Sample Time: 15:15 (military)

*If Duplicate Sample Collected,
Please Record Below*

Duplicate Sample Code #:
 Duplicate Sample Time:

Site Conditions

New Site: Yes ☐ No ☒ Photo taken: Yes ☐ No ☒
 Site Type: DRY surface water process water
monitoring well domestic well adit seep
 spring other:

Weather Conditions: calm breeze windy
no precip. rain snow
clear p. cloudy overcast
 Air Temperature: °C 85 °F

For Groundwater Samples

well volume formula: $V = (TD-SWL) \times (\text{Dia.}^2)$	25	Comments
TD (ft.) <u>73.4</u>	Pumping Rate <u> </u> gpm	
SWL (ft.) <u>57.30</u>	no access/pumping	
Casing Diameter (I.D.) <u>2"</u>		
Water Volume (V) (gal): <u>2.5</u>	$V \times 3 = (\text{gal})$ <u>7.5</u>	
MP Description <u>Top of PVC</u>		
Actual Vol. Removed (gal.) <u>8.0</u>		
Water Level Recovery: <u>slow</u> moderate rapid		

For Surface Water Samples

Flow Method: Marsh McBirney Volumetric Flume Weir Estimate
Other Flow or Description: <u> </u>
Flow: <u> </u> gpm <u> </u> cfs Staff Gage: <u> </u>

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (μmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
1515			8.08	4418		13.5	

Turbidity: clear moderate
 (circle) slight very

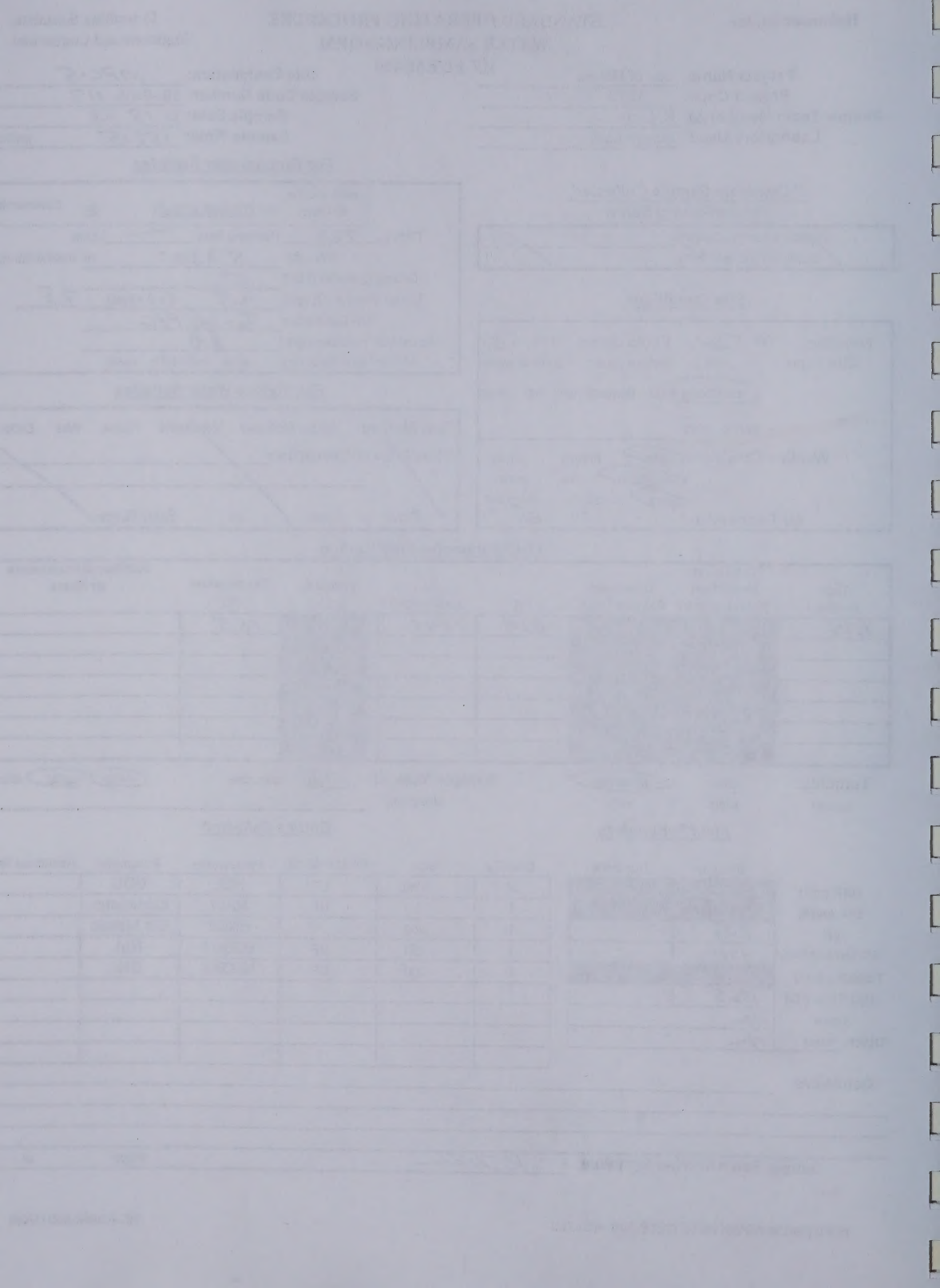
Sample Method: grab composite pump hailer other
 (describe)

Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	8.08	
SC (μmhos/cm)	4418	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	13.5	
Color	yes	
Other; odor	yes	

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments: Sample Team Member Signature: Rick ZPage of



STANDARD OPERATING PROCEDURE
WATER SAMPLING FORMConsulting Scientists,
Engineers and Contractors

HF-FORM-430

Project Name: City of HelenaProject Code: 1273Sample Team Member(s): R. LaneLaboratory Used: Energy LabsSite Designation: I-4Sample Code Number: HL-0806-118Sample Date: 6/18/08Sample Time: 14:00 (military)If Duplicate Sample Collected,
Please Record BelowDuplicate Sample Code #: Duplicate Sample Time: Site ConditionsNew Site: Yes ☐ No ☒ Photo taken: Yes ☐ No ☒Site Type: DRY surface water process watermonitoring well domestic well adit seepspring other: Weather Conditions: calm breeze windyno precip. rain snowclear p. cloudy overcastAir Temperature: °C 85 °F

well volume formula: $V = (TD-SWL) \times (Dia.^2)$	25	Comments
TD (ft.)	Pumping Rate	gpm
SWL (ft.)		no access/pumping
Casing Diameter (I.D. ")		
Water Volume (V) (gal):	$V \times 3 =$ (gal)	
MP Description		
Actual Vol. Removed (gal.)		
Water Level Recovery:	slow moderate rapid	

For Surface Water Samples

Flow Method:	Marsh McBirney	Volumetric	Flume	Weir	Estimate
Other Flow or Description:					
Flow:	gpm	cfs	Staff Gage:		

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (μmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
1400			7.99	1038		14.9	

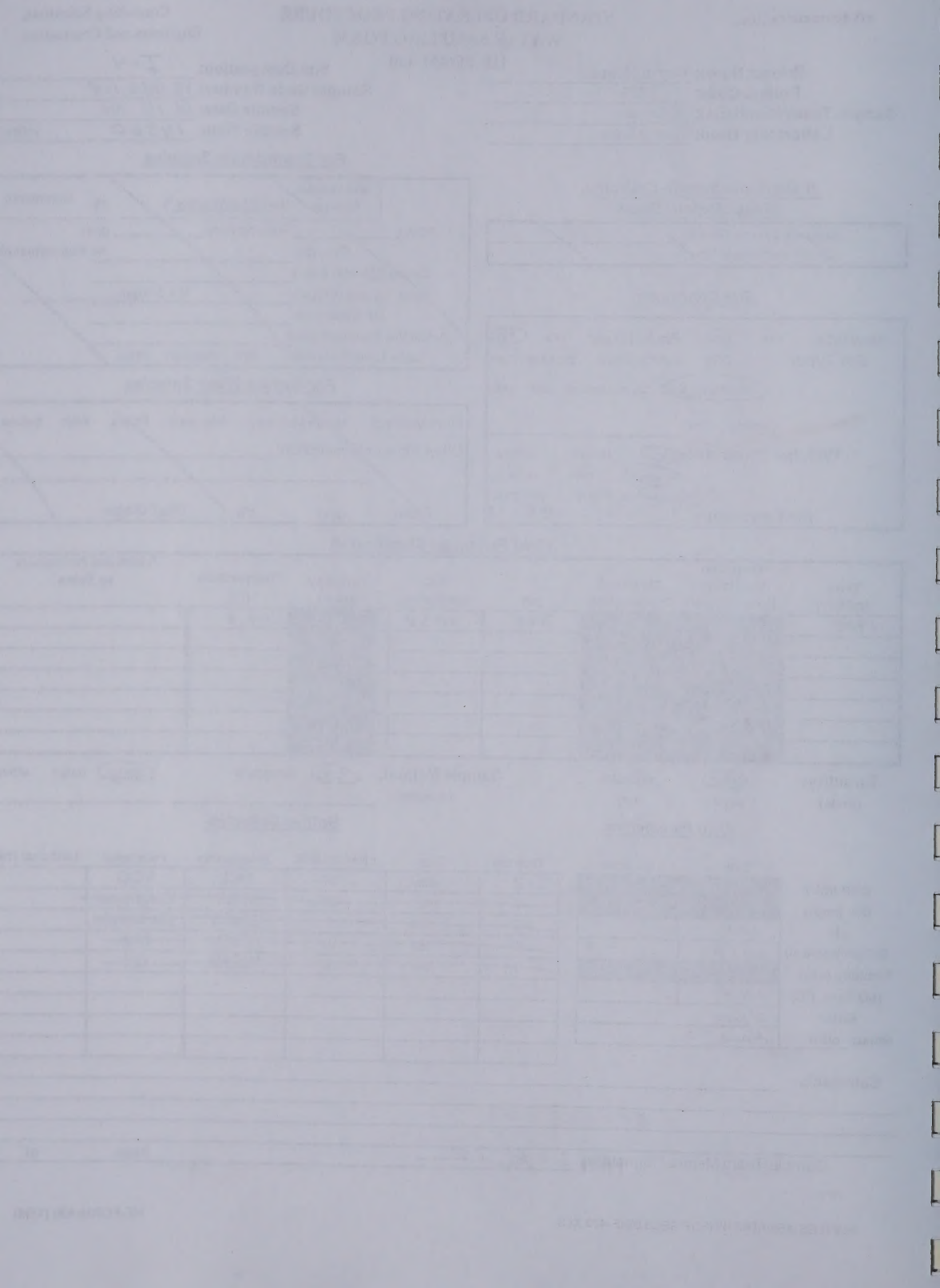
Turbidity: clear moderate slight verySample Method: grab composite pump bailer otherField Parameters

Sample	Duplicate
ORP (mV)	
DO (mg/l)	
pH	7.99
SC (μmhos/cm)	1038
Turbidity (ntu)	
H ₂ O Tmp. (°C)	14.9
Color	None
Other; odor	None

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments: Sample Team Member Signature: Rick ZPage of



STANDARD OPERATING PROCEDURE
WATER SAMPLING FORM

HF-FORM-430

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R. Lane
 Laboratory Used: Energy Labs

Site Designation: Res #5
 Sample Code Number: HL-0806-119
 Sample Date: 6/18/08
 Sample Time: 14:10 (military)

If Duplicate Sample Collected,
Please Record Below

Duplicate Sample Code #:
 Duplicate Sample Time:

Site Conditions

New Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐
 Site Type: DRY surface water process water
☒ monitoring well domestic well adit seep

spring other:

Weather Conditions: calm breeze windy
no precip. rain snow
clear p. cloudy overcast

Air Temperature: °C 95 °FFor Groundwater Samples

Well volume formula: $V = (TD - SW) \times (\text{Dia.}^2)$	25	Comments
TD (ft.)	Pumping Rate	gpm
SW (ft.)		no access/pumping
Casing Diameter (I.D.)		
Water Volume (V) (gal):	$V \times 3 = (\text{gal})$	
MP Description		
Actual Vol. Removed (gal.)		
Water Level Recovery:	slow moderate rapid	

For Surface Water Samples

Flow Method:	Marsh McBirney	Volumetric	Flume	Weir	Estimate
Other Flow or Description:					
Flow:	gpm	cfs	Staff Gage:		

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
1410			7.95	1126		13.1	

Turbidity: ☒ clear moderate
 (circle) slight very

Sample Method: ☒ grab composite ☒ pump bailer other
 (describe)

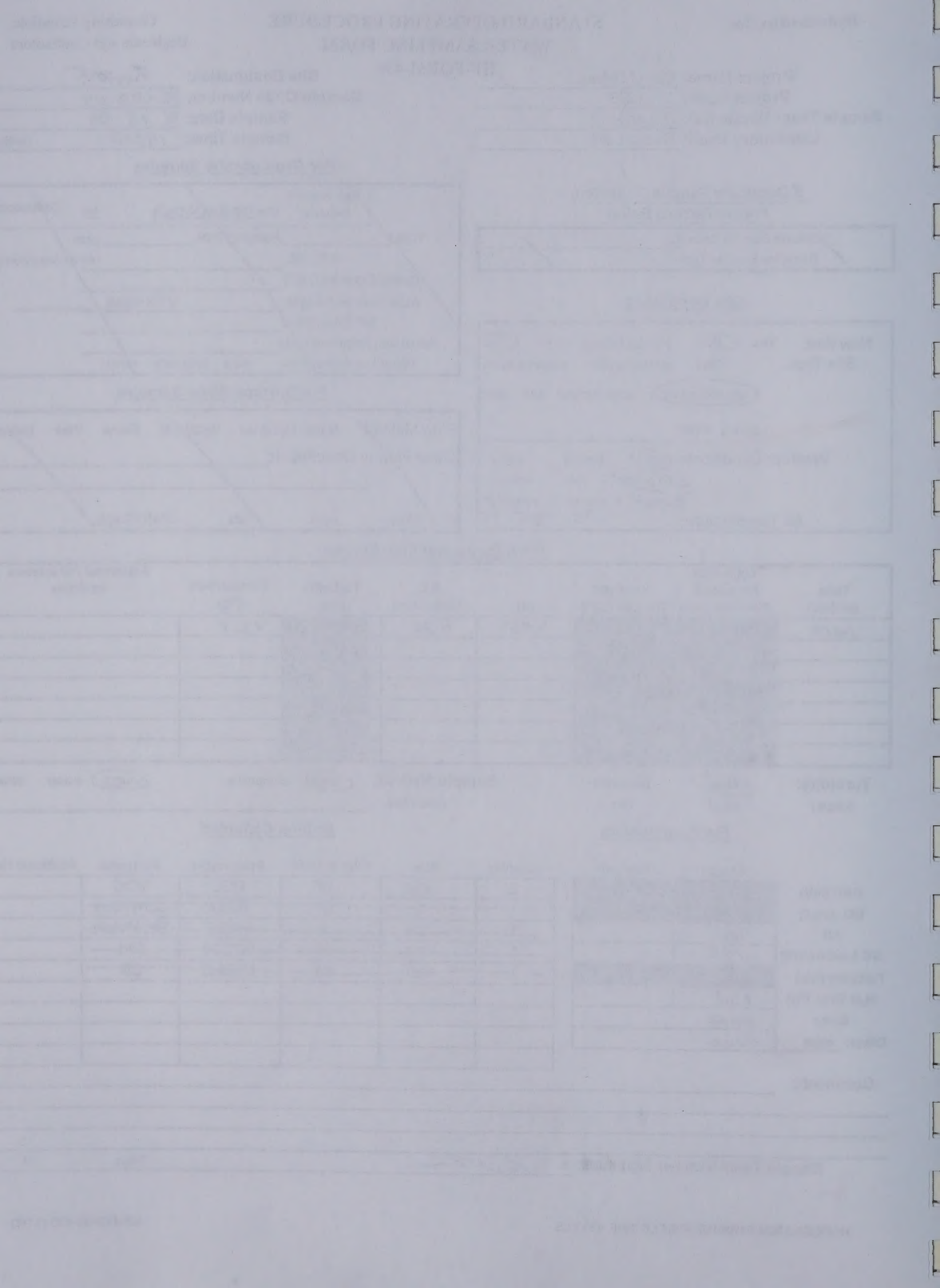
Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	7.95	
SC (µmhos/cm)	1126	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	13.1	
Color	None	
Other; odor	None	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments: Sample Team Member Signature: Rick ZPage of



STANDARD OPERATING PROCEDURE
WATER SAMPLING FORM

HF-FORM-430

Project Name: City of HelenaProject Code: 1273Sample Team Member(s): R. LaneLaboratory Used: Energy LabsSite Designation: HL-99-3Sample Code Number: HL-0806-120Sample Date: 6/19/08Sample Time: 08:30 (military)For Groundwater SamplesIf Duplicate Sample Collected,
Please Record BelowDuplicate Sample Code #: Duplicate Sample Time: Site ConditionsNew Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐Site Type: DRY surface water process watermonitoring well domestic well adit seepspring other: Weather Conditions: calm breeze windyno precip. rain snowclear p. cloudy overcastAir Temperature: °C 70 °Fwell volume
formula: $V = (TD-SWL) \times (\text{Dia.}^2)$ 25 CommentsTD (ft.) 105' Pumping Rate gpmSWL (ft.) 75.30' no access/pumpingCasing Diameter (I.D.) Water Volume (V) (gal): V x 3 = (gal)MP Description Top of CasingActual Vol. Removed (gal.) Water Level Recovery: slow moderate rapidFor Surface Water SamplesFlow Method: Marsh McBirney Volumetric Flume Weir EstimateOther Flow or Description: Flow: gpm cfsStaff Gage: Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
08:30			7.23	960		13.9	

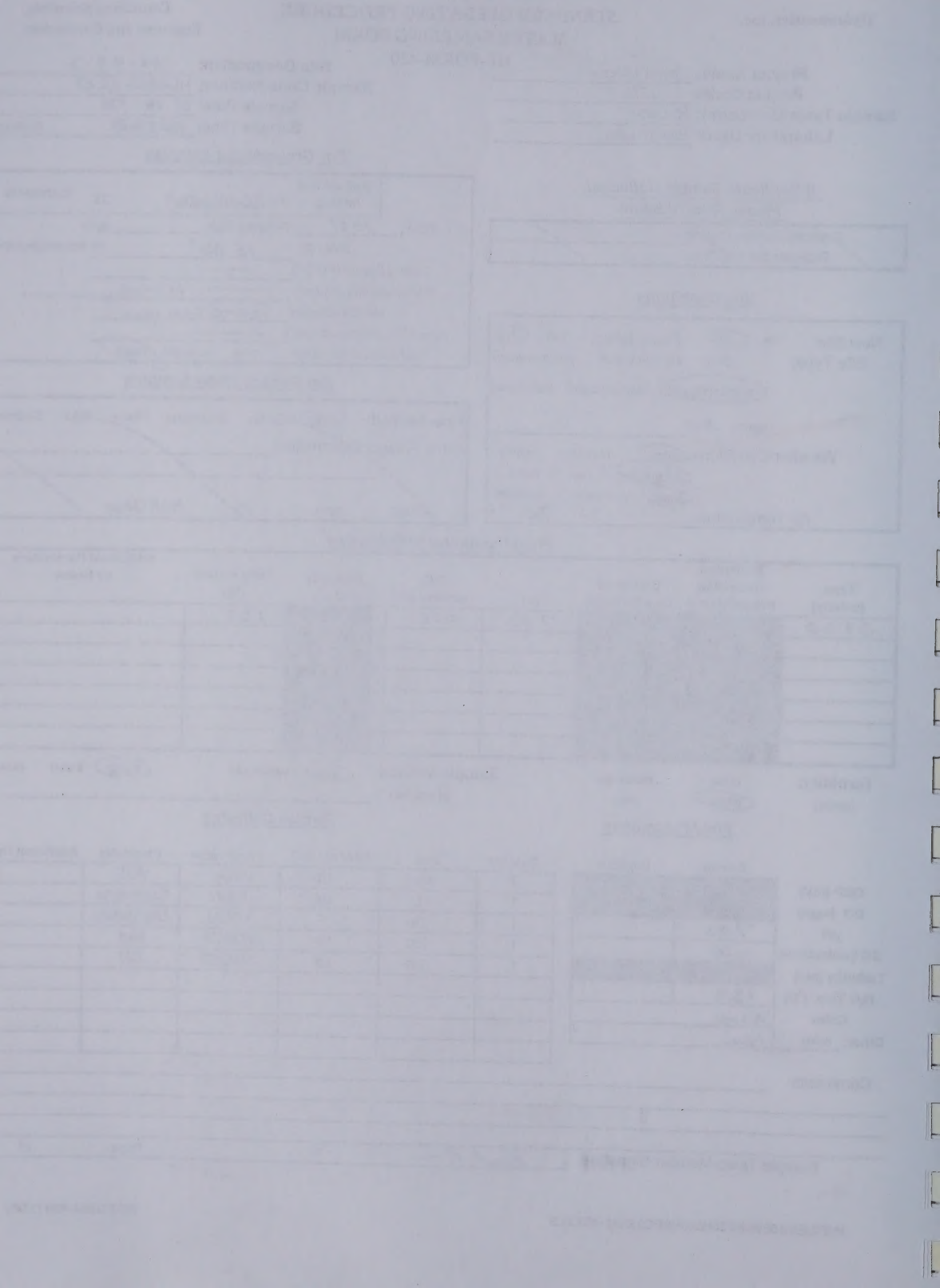
Turbidity: clear moderate
(circle) slight verySample Method: grab composite pump bailer other
(describe)Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	7.23	
SC (µmhos/cm)	960	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	13.9	
Color	None	
Other; odor	yes	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments: Sample Team Member Signature: Rick ZPage of



STANDARD OPERATING PROCEDURE
WATER SAMPLING FORMConsulting Scientists,
Engineers and Contractors

HF-FORM-430

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R. Lane
 Laboratory Used: Energy Labs

Site Designation: HL-99-2
 Sample Code Number: HL-0806-121
 Sample Date: 6/19/08
 Sample Time: 09:00 (military)

If Duplicate Sample Collected,
Please Record Below

Duplicate Sample Code #:
 Duplicate Sample Time:

Site Conditions

New Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐
 Site Type: DRY surface water process water

monitoring well domestic well adit seep

spring other:

Weather Conditions: calm breeze windy

no precip. rain snow

clear p. cloudy overcast

Air Temperature: 70 °F

well volume
 formula: $V = (TD-SWL) \times (Dia.^2)$ 25 Comments

TD (ft.) 118 Pumping Rate gpm

SWL (ft.) 84.09 no access/pumping

Casing Diameter (I.D.)

Water Volume (V) (gal): $V \times 3 = (\text{gal})$

MP Description Top of Casing

Actual Vol. Removed (gal.)

Water Level Recovery: slow moderate rapid

For Surface Water Samples

Flow Method: Marsh McBirney Volumetric Flume Weir Estimate

Other Flow or Description:

Flow: gpm cfs Staff Gage:

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
0900			7.09	808		13.4	

Turbidity: clear moderate
 (circle) slight very

Sample Method: grab composite pump bailer other
 (describe)

Field Parameters

Sample	Duplicate
ORP (mV)	
DO (mg/l)	
pH	7.09
SC (µmhos/cm)	808
Turbidity (ntu)	
H ₂ O Temp. (°C)	13.4
Color	None
Other; odor	Slight

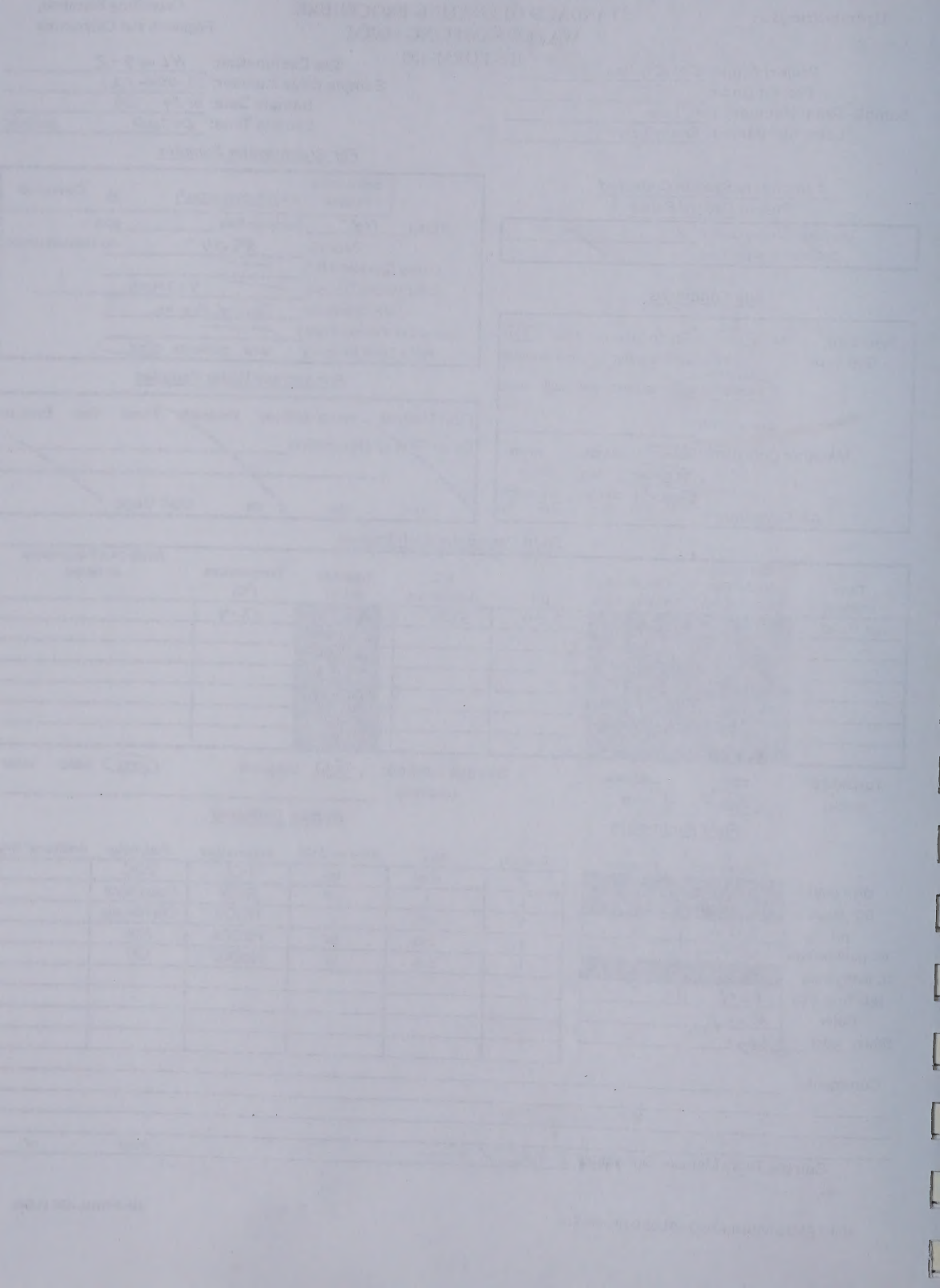
Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments:

Sample Team Member Signature: Rick Z

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STANDARD OPERATING PROCEDURE
WATER SAMPLING FORMConsulting Scientists,
Engineers and Contractors

HF-FORM-430

Project Name: City of HelenaProject Code: 1273Sample Team Member(s): R. LaneLaboratory Used: Energy LabsSite Designation: HL-99-1Sample Code Number: HL-0806-122Sample Date: 6/19/08Sample Time: 09:30 (military)For Groundwater SamplesIf Duplicate Sample Collected,
Please Record BelowDuplicate Sample Code #: Duplicate Sample Time: Site ConditionsNew Site: Yes ☐ No ☒ Photo taken: Yes ☐ No ☒Site Type: DRY surface water process water☒ monitoring well domestic well adit seepspring other: Weather Conditions: calm breeze windyno precip. rain snowclear p. cloudy overcastAir Temperature: °C 70 °Fwell volume
formula: $V = (TD-SWL) \times (\text{Dia.})^2$ 25 CommentsTD (ft.) 98 Pumping Rate gpmSWL (ft.) 75.5 no access/pumpingCasing Diameter (I.D.) Water Volume (V) (gal): V x 3 = (gal) MP Description Top of casingActual Vol. Removed (gal.) Water Level Recovery: slow moderate rapidFor Surface Water SamplesFlow Method: Marsh McBirney Volumetric Flume Weir EstimateOther Flow or Description: Flow: gpm cfs Staff Gage: Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
0930			6.93	1089		14.2	

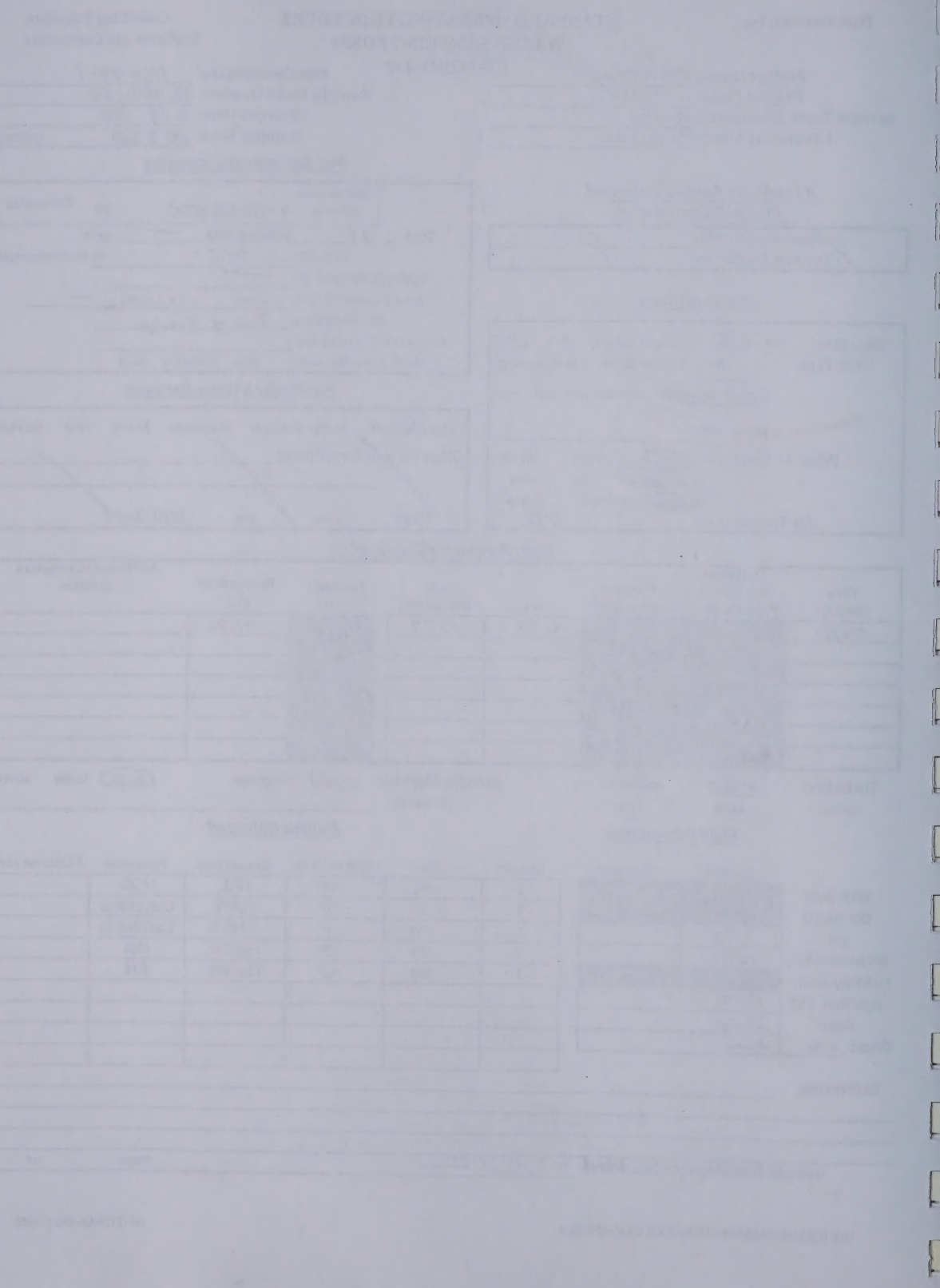
Turbidity: clear moderate
(circle) slight verySample Method: grab composite pump bailer other
(describe)Field Parameters

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	6.93	
SC (µmhos/cm)	1089	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	14.2	
Color	None	
Other; odor	Yes	

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments: Sample Team Member Signature: Rick ZPage of



STANDARD OPERATING PROCEDURE
WATER SAMPLING FORMConsulting Scientists,
Engineers and Contractors

HF-FORM-430

Project Name: City of Helena
 Project Code: 1273
 Sample Team Member(s): R. Lane
 Laboratory Used: Energy Labs

Site Designation: HL Res #62
 Sample Code Number: HL-0806-123
 Sample Date: 6/19/08
 Sample Time: 09:45 (military)

If Duplicate Sample Collected,
Please Record Below

Duplicate Sample Code #:
 Duplicate Sample Time:

Site Conditions

New Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐
 Site Type: DRY surface water process water

monitoring well domestic well adit seep

spring other:

Weather Conditions: calm breeze windy
no precip. rain snow
clear p. cloudy overcast

Air Temperature: °C 70 °F

For Groundwater Samples

well volume formula: $V = (TD-SWL) \times (Dia.^2)$	25	Comments
TD (ft.)	Pumping Rate	gpm
SWL (ft.)		no access/pumping
Casing Diameter (I.D.)		
Water Volume (V) (gal.)	V x 3 = (gal)	
MP Description		
Actual Vol. Removed (gal.)		
Water Level Recovery:	slow moderate rapid	

For Surface Water Samples

Flow Method: Marsh McBirney Volumetric Flume Weir Estimate

Other Flow or Description:

Flow: gpm cfs Staff Gage:

Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
0945			7.39	903		10.4	

Turbidity: clear moderate
 (circle) slight very

Sample Method: grab composite pump bailer other
 (describe)

Field ParametersBottles Collected

	Sample	Duplicate
ORP (mV)		
DO (mg/l)		
pH	7.39	
SC (µmhos/cm)	903	
Turbidity (ntu)		
H ₂ O Tmp. (°C)	10.4	
Color	None	
Other; odor	None	

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	

Comments:

Sample Team Member Signature: Ruth Z

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STANDARD OPERATING PROCEDURE
WATER SAMPLING FORMConsulting Scientists,
Engineers and Contractors

HF-FORM-430

Project Name: City of HelenaProject Code: 1273Sample Team Member(s): R. LaneLaboratory Used: Energy LabsSite Designation: HL- Rinsate BlankSample Code Number: HL-0806-124Sample Date: 6/19/08Sample Time: 10:30 (military)If Duplicate Sample Collected,
Please Record BelowDuplicate Sample Code #: /Duplicate Sample Time: /Site ConditionsNew Site: Yes ☒ No ☐ Photo taken: Yes ☒ No ☐Site Type: DRY surface water process water☒ monitoring well domestic well adit seepspring other: QAQCWeather Conditions: calm breeze windyno precip. rain snowclear p. cloudy overcastAir Temperature: 80 °FFor Groundwater Sampleswell volume
formula: $V = (TD-SWL) \times (\text{Dia.}^2)$ 25 CommentsTD (ft.): / Pumping Rate / gpmSW (ft.): / no access/pumpingCasing Diameter (I.D.): /Water Volume (V) (gal): V x 3 = (gal)MP Description /Actual Vol. Removed (gal.) /Water Level Recovery: / slow moderate rapidFor Surface Water SamplesFlow Method: / Marsh McBirney Volumetric Flume Weir EstimateOther Flow or Description: /Flow: / gpm cfs Staff Gage: /Field Parameter Stabilization

Time (military)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	pH	S.C. (µmhos/cm)	Turbidity (n.t.u.)	Temperature (°C)	Additional Parameters or Notes
/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/

Turbidity: clear moderate
(circle) slight verySample Method: grab composite pump bailer other
(describe)Field Parameters

Sample Duplicate

ORP (mV)	/	/
DO (mg/l)	/	/
pH	/	/
SC (µmhos/cm)	/	/
Turbidity (ntu)	/	/
H ₂ O Tmp. (°C)	/	/
Color	/	/
Other; odor	/	/

Bottles Collected

Quantity	Size	Filter or Unfilt.	Preservative	Parameter	Additional Notes
2	40mL	UF	HCL	VOC	
1	L	UF	RAW	Commons	
1	250	F	HNO3	Dis Metals	
1	250	UF	H2SO4	Nut	
1	500	UF	NaOH3	CN	
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/

Comments: /Sample Team Member Signature: R. LanePage 1 of 1

	Sample Code #	Rate Time	SOL TD	Bottles
MPL-2	HL-0806	6/17/08	17.43"	2/40 w/ HCL/VOL
	100	0900	35.5"	
Infiltration	HL-0806	6/17/08		
Crullery	101	0915	—	
HL-90-1	HL-0806	6/18/08	58.39"	2/40 w/ HCL/VOL
	102	1415	60"	1/2 w/ Rax/Com
				1/250 w/ HNO ₃ /Dmet
				1/250 w/ H ₂ SO ₄ /NO ₃
HL-90-2	HL-0806	6/19/08	50.71"	1/500 w/ H ₂ NO ₃ /CN
	103	1200	68"	
HL-94-2	HL-0806	6/17/08	25.76"	
	104	1100	41"	
Res #52	HL-0806	6/17/08	—	2/40
	105	1230	—	
Res #57	HL-0806	6/17/08	—	
	106	1250	—	

PH	Sc	Temp	Comments
6.80	843	9.7	Purged 10 gal with Pump, Sampled VOCs with 2" Disp Bottle
7.27	232	10.9	Sampled for VOCs with 2" Disp Bottle.
8.12	929	14.1	Purged 1 Vol Lat Recirc and Sampled with 2" Disp Bottle. VOCs Only To Little Water To Sample
10.0	73	10.7	Purged 33 gal with Grundfos Pump System and Sampled, Sampled for Organics with 2" Disp Bottle.
10.0	923	10.8	Purged 8.0 gal with 12v Pump and Sampled, Sampled for Organics with 2" Disp Bottle.
10.94	1723	13.5	Purged Well for 10 min And Sampled for Organics
8.02	1447	12.1	

Site	Sample Code**	Date Time	SOL ID	Bottles
HL-40-3	HL-0806 114	6/18/08 1115	65.52' 79'	Full Set
HL-40-3	HL-0806 Dup	6/18/08 1130	SAME	
HL-41-1	HL-0806 116	6/18/08 1310	59.30 88'	
MPC-5	HL-0806 117	6/18/08 1515	57.30 73.4'	
I-4	HL-0806 118	6/18/08 1400	— —	2/40/4F/HL/NO
Res#5	HL-0806 Colvin	6/18/08 1410	— —	

PH / GC / Temp
8.18 / 1043 / 11.9

^{92ml}
Purged 30 gal with
bubbles and sampled.
Sampled for organics
with 2" Disp. Bottle

8.14 / 981 / 12.1

15 gal

9.08 / 4418 / 13.5

7.5 gal

7.94 / 1038 / 14.9

7.95 / 1126 / 13.1

Site	Sample Code#	Date Time	SWL TD	Bottles	pH / SL / Temp			Comments
H	HL-99-3	HL-0806	6/19/08	75.30'	Full Set	7.23 960 13.9		H _r - 1128.1 T ₁ - 500756 T ₂ - 526263 Fm - 37.8
		120	0830	105'				
H								
HL								
	HL-99-2	HL-0806	6/19/08	89.09		7.04 803 13.4		H _r - 1124.0 T ₁ - 342466 T ₂ - 741229 Fm - 23.2
		121	0900	118'				
MF								
I								
	HL-99-1	HL-0806	6/19/08	75.5'		6.93 1089 14.2		H _r - 1129.6 T ₁ - 383943 T ₂ - 383945 Fm - 6.7
		122	0930	98'				
Re:								
Co								
	Res #62	HL-0806	6/19/08	—	2 H ₂ O / H ₂ F / H ₂ CO ₃	7.39 903 10.4		
	Herrin	123	0945	—				

<u>Site</u>	<u>Sample Code#</u>	<u>Date Time</u>	<u>Sub- TD</u>	<u>Bottles</u>
Rinsate	HL-0806-	6/19/08	—	Full Set
Blank	124	1030	—	

Calligan DI Water Ren
Through Grundfos Pump System
And Sampled.

Water Levels

EPA-1 - Dry

EPA-4 - Dry 76.82'

I-1 - 67.18'

83-7 - Dry

STANDARD OPERATING PROCEDURE INSTRUMENT CALIBRATION FORM HF-FORM-500

Project Name: City of HelenaProject Number: 1273Date: 6/17/08Personnel: R Lane

pH

Meter Type: YSISN: 04K17594AF

Time	Buffer	Temperature	Reading (Temp Corrected)
08:13	4	20.5	4.00
08:10	7	20.6	7.00
08:17	10	20.3	9.93
Calibration check:			

Weather Conditions:

calm	breeze	windy
no precip	rain	snow
clear	p. cloudy	overcast

IN LAB

Air Temperature:

°F

°C

Dissolved Oxygen

Meter Type:

SN:

Time:

Calibration Results:

Specific Conductance

Meter Type:

SN:

Time	Standard	Temperature	Reading (Temp Corrected)	Cell Factor
08:21	1413	20.5	1413	—
Calibration check:				

Turbidity

Meter Type:

SN:

Standard:

Reading:

Redox Potential (Eh)

Meter Type:

SN:

Electrode:

Reference:

Buffer:

Time:

Zobell Solution Potential (mV):

Temperature:

PID/FID

Meter Type:

SN:

Span Gas Type:

Time	Conditions	Calibration	Response	Reading
	Range, Pressure, Concentration	Method	Factor	
Calibration check:				

Notes/Additional Information:

Personnel: R Lane

°F °C

Meter Type	
ISN	
Time	
Calibration Results	

Water Temp. _____

SN: _____

Electrode _____

Time _____

Zelma Solutions, Inc. _____

on page _____

Time	Buffer	Temperature	Reading (Temp Corrected)
08:09	4	20.3	4.00
08:02	7	19.9	7.00
08:10	10	20.1	9.95
Calibration check:			

Meter Type: _____		SN: _____		
Time	Standard	Temperature	Reading (Temp Corrected)	Cell Factor
08:15	1413	1413.202	1413	—
Calibration check:				

Victor Davis	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05	2105-06	2106-07	2107-08	2108-09	2109-10	2110-11	2111-12	2112-13	2113-14	2114-15	2115-16	2116-17	2117-18	2118-19	2119-20	2120-21	2121-22	2122-23	2123-24	2124-25	2125-26	2126-27	2127-28	2128-29	2129-30	2130-31	2131-32	2132-33	2133-34	2134-35	2135-36	2136-37	2137-38	2138-39	2139-40	2140-41	2141-42	2142-43	2143-44	2144-45	2145-46	2146-47	2147-48	2148-49	2149-50	2150-51	2151-52	2152-53	2153-54	2154-55	2155-56	2156-57	2157-58	2158-59	2159-60	2160-61	2161-62	2162-63	2163-64	2164-65	2165-66	2166-67	2167-68	2168-69	2169-70	2170-71	2171-72	2172-73	2173-74	2174-75	2175-76	2176-77	2177-78	2178-79	2179-80	2180-81	2181-82	2182-83	2183-84	2184-85	2185-86	2186-87	2187-88	2188-89	2189-90	2190-91	2191-92	2192-93	2193-94	2194-95	2195-96	2196-97	2197-98	2198-99	2199-00	2200-01	2201-02	2202-03	2203-04	2204-05	2205-06	2206-07	2207-08	2208-09	2209-10	2210-11	2211-12	2212-13	2213-14	2214-15	2215-16	2216-17	2217-18	2218-19	2219-20	2220-21	2221-22	2222-23	2223-24	2224-25	2225-26	2226-27	2227-28	2228-29	2229-30	2230-31	2231-32	2232-33	2233-34	2234-35	2235-36	2236-37	2237-38	2238-39	2239-40	2240-41	2241-42	2242-43	2243-44	2244-45	2245-46	2246-47	2247-48	2248-49	2249-50	2250-51	2251-52	2252-53	2253-54	2254-55	2255-56	2256-57	2257-58	2258-59	2259-60	2260-61	2261-62	2262-63	2263-64	2264-65	2265-66	2266-67	2267-68	2268-69	2269-70	2270-71	2271-72	2272-73	2273-74	2274-75	2275-76	2276-77	2277-78	2278-79	2279-80	2280-81	2281-82	2282-83	2283-84	2284-85	2285-86	2286-87	2287-88	2288-89	2289-90	2290-91	2291-92	2292-93	2293-94	2294-95	2295-96	2296-97	2297-98	2298-99	2299-00	2300-01	2301-02	2302-03	2303-04	2304-05
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Metric Type					
Span Class Name					
Item	Span Class Name		Child Span Count	Parent Span Count	Reading
	Class Name	Content Name	Quantity	Value	
Category Group					

[illegible]

STANDARD OPERATING PROCEDURE INSTRUMENT CALIBRATION FORM HF-FORM-500

Project Name: City of HelenaProject Number: 1273Date: 6/19/08Personnel: R Lane**pH**Meter Type: YSISN: 04K17594AF

Time	Buffer	Temperature	Reading (Temp Corrected)
08:12	4	20.9	4.00
08:10	7	21.2	7.00
08:15	10	20.9	9.98
Calibration check:			

Weather Conditions:

calm	breeze	windy
no precip	rain	snow
clear	p. cloudy	overcast

IN LAB

Air Temperature:

°F

°C

Dissolved Oxygen

Meter Type:

SN:

Time:

Calibration Results:

Specific Conductance

Meter Type:

SN:

Time	Standard	Temperature	Reading (Temp Corrected)	Cell Factor
08:20	1413	20.9	1413	—
Calibration check:				

Turbidity

Meter Type:

SN:

Standard:

Reading:

Redox Potential (Eh)

Meter Type:

SN:

Electrode:

Time:

Redox Solution/Reference:

Temperature:

PID/FID

Meter Type:

SN:

Span/Gas Type:

Time	Span/Gas	Concentration	Response	Reading
	Leak Pressure	Concentration	Volume	Factor
Calibration Check:				

Notes/Additional Information:



CHAIN OF CUSTODY RECORD

3020 Bozeman Avenue • Helena, Montana 59601 • (406) 443-4150

PROJ. NO. 1273		PROJECT NAME City of Helena		NO. OF CON- TAINERS	Commons UF RAW Nutrients UF H₂SO₄ Diss. Metals F HNO₃ CN UF NaOH Total Metals UF HNO₃ Total Recoverable Metals UF HNO₃ BTEX TPH UF-HCL 5% HCL												REMARKS		
SAMPLERS: (Signature) <i>RIZ</i>																			
DATE	TIME	COMP	GRAB	SAMPLE NUMBER															
6/17/08	0900		X	HL-0806-100	2													X	
	0915			101	2														
	1230			105															
	1250			106															
6/18/08	0845			110															
	0915			111															
	1000			113															
	1400			118															
	1410			119															
6/19/08	0945		X	123														X	
6/18/08	1415			HL-0806-102	2													X	
Relinquished (Signature) <i>RIZ</i>		Date/Time 6/19/08 1310		Received by: (Signature) <i>Whelan</i>		Lab Energy Lab				P.O. # HLN09590		Shipped via: Bus, Fed Ex, UPS Other <i>helicopter</i> Air Bill #							
Relinquished (Signature)		Date/Time		Received by: (Signature)		Remarks * 0.001 mg/L Detection Limit													
Relinquished (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time		Enclosed: ☒ Parameter sheet w/ detection limits ☐ QA/QC standard mixing instructions ☐ Cover letter ☐ Other											
Split Samples: ☐ Accepted ☐ Declined																		Signature	



3020 Bozeman Avenue • Helena, Montana 59601 • (406) 443-4150

PROJ. NO.		PROJECT NAME		NO. OF CONTAINERS	ANALYSIS PARAMETERS										REMARKS
1273		City of Helena			Commons UF/RAW	Nutrients UF/H ₂ SO ₄	Diss. Metal F/HNO ₃	CN UF/NaOH	Total Metals UF/HNO ₃	Total Recoverable Metals UF/HNO ₃	BTEX	TPH	1,1,1,2,2,2-HFC	1,1,1,2,2,2-HFC	
SAMPLERS: (Signature) R. Z.															
DATE	TIME	COMP	GRAB	SAMPLE NUMBER											
6/17/08	1415		X	HL 0806-102	X	X	X	X				X			
	1100			HL 0806-104	X	X	X	X				X			
	1325			107											
	1400			108											
6/18/08	0830			109											
	0845			112											
	1115			114											
	1130			115											
	1310			116											
	1515			117											
6/18/08	0830			120											
	0900			121											
	0930			122											
	1200			103											
	1030			124											
Relinquished (Signature) R. Z.		Date/Time 6/18/08 13 ⁰⁰		Received by: (Signature) W. J.		Lab Energy Lab		P.O. # HLN09590		Shipped via: Bus, Fed Ex, UPS Other: Hand delivered Air Bill #					
Relinquished (Signature)		Date/Time		Received by: (Signature)		Remarks * 0.001 mg/L Detection Limit									
Relinquished (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time		Enclosed: ☒ Parameter sheet w/detection limits ☐ QA/QC standard mixing instructions ☐ Cover letter ☐ Other							

APPENDIX 4

ENERGY LABORATORIES ANALYTICAL REPORT



ANALYTICAL SUMMARY REPORT

July 03, 2008

Hydrometrics Inc
3020 Bozeman Ave
Helena, MT 59601

Workorder No.: H08060389

Project Name: 1273 City of Helena

Energy Laboratories Inc received the following 11 samples from Hydrometrics Inc on 6/19/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H08060389-001	HL-0806-100	06/17/08 9:00	06/19/08	Aqueous	8260-Volatile Organic Comp, 40 CFR Part 258 App I
H08060389-002	HL-0806-101	06/17/08 9:15	06/19/08	Aqueous	Same As Above
H08060389-003	HL-0806-105	06/17/08 12:30	06/19/08	Aqueous	Same As Above
H08060389-004	HL-0806-106	06/17/08 12:50	06/19/08	Aqueous	Same As Above
H08060389-005	HL-0806-110	06/18/08 8:45	06/19/08	Aqueous	Same As Above
H08060389-006	HL-0806-111	06/18/08 9:15	06/19/08	Aqueous	Same As Above
H08060389-007	HL-0806-113	06/18/08 10:00	06/19/08	Aqueous	Same As Above
H08060389-008	HL-0806-118	06/18/08 14:00	06/19/08	Aqueous	Same As Above
H08060389-009	HL-0806-119	06/18/08 14:10	06/19/08	Aqueous	Same As Above
H08060389-010	HL-0806-123	06/19/08 9:45	06/19/08	Aqueous	Same As Above
H08060389-011	HL-0806-102	06/18/08 14:15	06/19/08	Aqueous	Same As Above

BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945
eli-r - Energy Laboratories, Inc. - Rapid City, SD, EPA# SD00012
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

ELI appreciates the opportunity to provide you with this analytical service. For additional information, including certifications, and analytical services visit our web page www.energylab.com.

Report Approved By: _____



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-001
Client Sample ID: HL-0806-100

Report Date: 06/28/08
Collection Date: 06/17/08 09:00
Date Received: 06/19/08
Matrix: Aqueous

mpc-2

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/22/08 18:57 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/22/08 18:57 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Chloroform	0.19	ug/L	J	1.0		SW8260B	06/22/08 18:57 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
cis-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/22/08 18:57 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/22/08 18:57 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/22/08 18:57 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
Tetrachloroethene	0.78	ug/L	J	1.0		SW8260B	06/22/08 18:57 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 18:57 / jdh

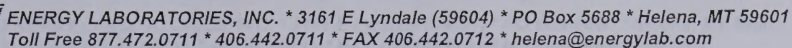
Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

J - Estimated value. The analyte was present but less than the reporting limit.



Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-001
Client Sample ID: HL-0806-100

Report Date: 06/28/08
Collection Date: 06/17/08 09:00
DateReceived: 06/19/08
Matrix: Aqueous

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	J - Estimated value. The analyte was present but less than the reporting limit.	



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-002
Client Sample ID: HL-0806-101

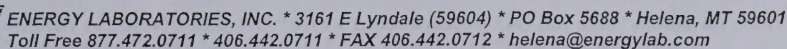
Report Date: 06/28/08
Collection Date: 06/17/08 09:45-
Date Received: 06/19/08
Matrix: Aqueous

Infiltration Gallery

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/22/08 19:26 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/22/08 19:26 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Chloroform	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
cis-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/22/08 19:26 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/22/08 19:26 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/22/08 19:26 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 19:26 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-002
Client Sample ID: HL-0806-101

Report Date: 06/28/08
Collection Date: 06/17/08 09:15
DateReceived: 06/19/08
Matrix: Aqueous

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-011
Client Sample ID: HL-0806-102

Report Date: 06/28/08
Collection Date: 06/18/08 14:15
Date Received: 06/19/08
Matrix: Aqueous

HL-92-1

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 12:56 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 12:56 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Chloroform	1.2	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
1,1-Dichloroethane	1.2	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
cis-1,2-Dichloroethene	0.56	ug/L	J	1.0		SW8260B	06/23/08 12:56 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/23/08 12:56 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/23/08 12:56 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/23/08 12:56 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Tetrachloroethene	3.9	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 12:56 / jdh

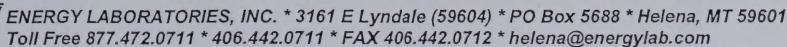
Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



Report Date: 06/28/08
Collection Date: 06/18/08 14:15
DateReceived: 06/19/08
Matrix: Aqueous

Report	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
Definitions:	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	J - Estimated value. The analyte was present but less than the reporting limit.	



ENERGY LABORATORIES, INC. * 3161 E Lyndale (59604) * PO Box 5688 * Helena, MT 59601
Toll Free 877.472.0711 * 406.442.0711 * FAX 406.442.0712 * helena@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-003
Client Sample ID: HL-0806-105

Report Date: 06/28/08
Collection Date: 06/17/08 12:30
Date Received: 06/19/08
Matrix: Aqueous

Res #52

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/22/08 19:56 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/22/08 19:56 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Chloroform	4.4	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Dichlorodifluoromethane	0.85	ug/L	J	1.0		SW8260B	06/22/08 19:56 / jdh
1,1-Dichloroethane	0.43	ug/L	J	1.0		SW8260B	06/22/08 19:56 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
cis-1,2-Dichloroethene	0.42	ug/L	J	1.0		SW8260B	06/22/08 19:56 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/22/08 19:56 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/22/08 19:56 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/22/08 19:56 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Tetrachloroethene	2.4	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-003
Client Sample ID: HL-0806-105

Report Date: 06/28/08
Collection Date: 06/17/08 12:30
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichloroethene	0.38	ug/L	J	1.0		SW8260B	06/22/08 19:56 / jdh
Trichlorofluoromethane	0.40	ug/L	J	1.0		SW8260B	06/22/08 19:56 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Xylenes, Total	ND	ug/L		1.0		SW8260B	06/22/08 19:56 / jdh
Surr: 1,2-Dichloroethane-d4	90.0	%REC		70-130		SW8260B	06/22/08 19:56 / jdh
Surr: Dibromofluoromethane	95.0	%REC		70-130		SW8260B	06/22/08 19:56 / jdh
Surr: p-Bromofluorobenzene	89.0	%REC		70-130		SW8260B	06/22/08 19:56 / jdh
Surr: Toluene-d8	94.0	%REC		70-130		SW8260B	06/22/08 19:56 / jdh
- The sample was received in the laboratory at a pH >2. The pH was 7.0.							

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-004
Client Sample ID: HL-0806-106

Report Date: 06/28/08
Collection Date: 06/17/08 12:50
Date Received: 06/19/08
Matrix: Aqueous

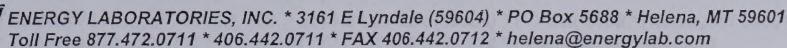
Res # 57

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 18:50 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 18:50 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Chloroform	3.2	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Dichlorodifluoromethane	0.73	ug/L	J	1.0		SW8260B	06/23/08 18:50 / jdh
1,1-Dichloroethane	0.30	ug/L	J	1.0		SW8260B	06/23/08 18:50 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
cis-1,2-Dichloroethene	0.21	ug/L	J	1.0		SW8260B	06/23/08 18:50 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/23/08 18:50 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/23/08 18:50 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/23/08 18:50 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Tetrachloroethene	1.7	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-004
Client Sample ID: HL-0806-106

Report Date: 06/28/08
Collection Date: 06/17/08 12:50
DateReceived: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichloroethene	0.29	ug/L	J	1.0		SW8260B	06/23/08 18:50 / jdh
Trichlorofluoromethane	0.30	ug/L	J	1.0		SW8260B	06/23/08 18:50 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Xylenes, Total	ND	ug/L		1.0		SW8260B	06/23/08 18:50 / jdh
Surr: 1,2-Dichloroethane-d4	90.0	%REC		70-130		SW8260B	06/23/08 18:50 / jdh
Surr: Dibromofluoromethane	96.0	%REC		70-130		SW8260B	06/23/08 18:50 / jdh
Surr: p-Bromofluorobenzene	91.0	%REC		70-130		SW8260B	06/23/08 18:50 / jdh
Surr: Toluene-d8	94.0	%REC		70-130		SW8260B	06/23/08 18:50 / jdh
- The sample was received in the laboratory at a pH >2. The pH was 7.0.							

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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Toll Free 877.472.0711 * 406.442.0711 * FAX 406.442.0712 * helena@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-005
Client Sample ID: HL-0806-110

Report Date: 06/28/08
Collection Date: 06/18/08 08:45
Date Received: 06/19/08
Matrix: Aqueous

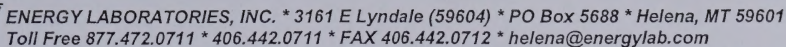
Res #40

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/22/08 20:25 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/22/08 20:25 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Chloroform	3.6	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Dichlorodifluoromethane	0.46	ug/L	J	1.0		SW8260B	06/22/08 20:25 / jdh
1,1-Dichloroethane	0.62	ug/L	J	1.0		SW8260B	06/22/08 20:25 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
cis-1,2-Dichloroethene	0.66	ug/L	J	1.0		SW8260B	06/22/08 20:25 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/22/08 20:25 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/22/08 20:25 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/22/08 20:25 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Tetrachloroethene	2.6	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 20:25 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-005
Client Sample ID: HL-0806-110

Report Date: 06/28/08
Collection Date: 06/18/08 08:45
DateReceived: 06/19/08
Matrix: Aqueous

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	J - Estimated value. The analyte was present but less than the reporting limit.	



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-006
Client Sample ID: HL-0806-111

Report Date: 06/28/08
Collection Date: 06/18/08 09:15
Date Received: 06/19/08
Matrix: Aqueous

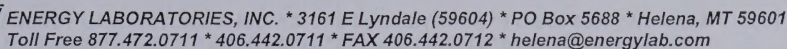
Res #48

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/22/08 20:54 /jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/22/08 20:54 /jdh
Benzene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Chloroform	3.8	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Dichlorodifluoromethane	0.34	ug/L	J	1.0		SW8260B	06/22/08 20:54 /jdh
1,1-Dichloroethane	0.44	ug/L	J	1.0		SW8260B	06/22/08 20:54 /jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
cis-1,2-Dichloroethene	0.38	ug/L	J	1.0		SW8260B	06/22/08 20:54 /jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/22/08 20:54 /jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/22/08 20:54 /jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/22/08 20:54 /jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Styrene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Tetrachloroethene	2.3	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
Toluene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 /jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

J - Estimated value. The analyte was present but less than the reporting limit.



LABORATORY ANALYTICAL REPORT

Report Date: 06/28/08
Collection Date: 06/18/08 09:15
DateReceived: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichloroethene	0.36	ug/L	J	1.0		SW8260B	06/22/08 20:54 / jdh
Trichlorofluoromethane	0.28	ug/L	J	1.0		SW8260B	06/22/08 20:54 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
Xylenes, Total	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
Surr: 1,2-Dichloroethane-d4	86.0	%REC		70-130		SW8260B	06/22/08 20:54 / jdh
Surr: Dibromofluoromethane	97.0	%REC		70-130		SW8260B	06/22/08 20:54 / jdh
Surr: p-Bromofluorobenzene	88.0	%REC		70-130		SW8260B	06/22/08 20:54 / jdh
Surr: Toluene-d8	90.0	%REC		70-130		SW8260B	06/22/08 20:54 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,1,1-Trichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,1,2-Trichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,3-Dichloropropane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichloropropane	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d6	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d8	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d10	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d12	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d14	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d16	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d18	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d20	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d22	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d24	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d26	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d28	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d30	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d32	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d34	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d36	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d38	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d40	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d42	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d44	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d46	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d48	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d50	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d52	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d54	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d56	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d58	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh
1,4-Dichlorobenzene-d60	ND	ug/L		1.0		SW8260B	06/22/08 20:54 / jdh

Report	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
Definitions:	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	J - Estimated value. The analyte was present but less than the reporting limit.	



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-007
Client Sample ID: HL-0806-113

Report Date: 06/28/08
Collection Date: 06/18/08 10:00
Date Received: 06/19/08
Matrix: Aqueous

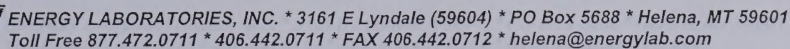
Ries #16

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/22/08 21:23 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/22/08 21:23 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Chloroform	1.6	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Dichlorodifluoromethane	0.42	ug/L	J	1.0		SW8260B	06/22/08 21:23 / jdh
1,1-Dichloroethane	0.22	ug/L	J	1.0		SW8260B	06/22/08 21:23 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
cis-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/22/08 21:23 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/22/08 21:23 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/22/08 21:23 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Tetrachloroethene	1.5	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 21:23 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-007
Client Sample ID: HL-0806-113

Report Date: 06/28/08
Collection Date: 06/18/08 10:00
DateReceived: 06/19/08
Matrix: Aqueous

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	J - Estimated value. The analyte was present but less than the reporting limit.	



ENERGY LABORATORIES, INC. * 3161 E Lyndale (59604) * PO Box 5688 * Helena, MT 59601
Toll Free 877.472.0711 * 406.442.0711 * FAX 406.442.0712 * helena@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-008
Client Sample ID: HL-0806-118

Report Date: 06/28/08
Collection Date: 06/18/08 14:00
Date Received: 06/19/08
Matrix: Aqueous

T-4

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/22/08 21:53 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/22/08 21:53 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Chloroform	1.4	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Dichlorodifluoromethane	0.84	ug/L	J	1.0		SW8260B	06/22/08 21:53 / jdh
1,1-Dichloroethane	1.1	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
cis-1,2-Dichloroethene	0.72	ug/L	J	1.0		SW8260B	06/22/08 21:53 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Ethylbenzene	0.17	ug/L	J	1.0		SW8260B	06/22/08 21:53 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/22/08 21:53 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/22/08 21:53 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/22/08 21:53 / jdh
Methylene chloride	0.19	ug/L	J	1.0		SW8260B	06/22/08 21:53 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Tetrachloroethene	4.2	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/22/08 21:53 / jdh

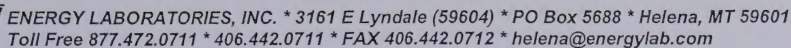
Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

J - Estimated value. The analyte was present but less than the reporting limit.



Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-008
Client Sample ID: HL-0806-118

Report Date: 06/28/08
Collection Date: 06/18/08 14:00
DateReceived: 06/19/08
Matrix: Aqueous

Report	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
Definitions:	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	J - Estimated value. The analyte was present but less than the reporting limit.	



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-009
Client Sample ID: HL-0806-119

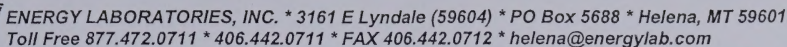
Report Date: 06/28/08
Collection Date: 06/18/08 14:10
Date Received: 06/19/08
Matrix: Aqueous

Res #5

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 11:57 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 11:57 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Chloroform	2.3	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Dichlorodifluoromethane	0.67	ug/L	J	1.0		SW8260B	06/23/08 11:57 / jdh
1,1-Dichloroethane	0.82	ug/L	J	1.0		SW8260B	06/23/08 11:57 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1-Dichloroethene	0.13	ug/L	J	1.0		SW8260B	06/23/08 11:57 / jdh
cis-1,2-Dichloroethene	0.24	ug/L	J	1.0		SW8260B	06/23/08 11:57 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/23/08 11:57 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/23/08 11:57 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/23/08 11:57 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Tetrachloroethene	4.0	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Report Date: 06/28/08
Collection Date: 06/18/08 14:10
DateReceived: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichloroethene	0.65	ug/L	J	1.0		SW8260B	06/23/08 11:57 / jdh
Trichlorofluoromethane	0.58	ug/L	J	1.0		SW8260B	06/23/08 11:57 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Xylenes, Total	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
Surr: 1,2-Dichloroethane-d4	86.0	%REC		70-130		SW8260B	06/23/08 11:57 / jdh
Surr: Dibromofluoromethane	93.0	%REC		70-130		SW8260B	06/23/08 11:57 / jdh
Surr: p-Bromofluorobenzene	88.0	%REC		70-130		SW8260B	06/23/08 11:57 / jdh
Surr: Toluene-d8	100	%REC		70-130		SW8260B	06/23/08 11:57 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,1-Trichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2-Trichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 11:57 / jdh
1,1,2,2-Tetrachloroethene	ND	ug/L		1.0</			

Report	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
Definitions:	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	J - Estimated value. The analyte was present but less than the reporting limit.	



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-010
Client Sample ID: HL-0806-123

Report Date: 06/28/08
Collection Date: 06/19/08 09:45
Date Received: 06/19/08
Matrix: Aqueous

Res # 62

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 12:27 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 12:27 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Chloroform	0.83	ug/L	J	1.0		SW8260B	06/23/08 12:27 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
cis-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/23/08 12:27 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/23/08 12:27 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/23/08 12:27 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Tetrachloroethene	0.44	ug/L	J	1.0		SW8260B	06/23/08 12:27 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060389-010
Client Sample ID: HL-0806-123

Report Date: 06/28/08
Collection Date: 06/19/08 09:45
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Trichlorofluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Xylenes, Total	ND	ug/L		1.0		SW8260B	06/23/08 12:27 / jdh
Surr: 1,2-Dichloroethane-d4	90.0	%REC		70-130		SW8260B	06/23/08 12:27 / jdh
Surr: Dibromofluoromethane	94.0	%REC		70-130		SW8260B	06/23/08 12:27 / jdh
Surr: p-Bromofluorobenzene	88.0	%REC		70-130		SW8260B	06/23/08 12:27 / jdh
Surr: Toluene-d8	96.0	%REC		70-130		SW8260B	06/23/08 12:27 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



ENERGY LABORATORIES, INC. * 3161 E Lyndale (59604) * PO Box 5688 * Helena, MT 59601
Toll Free 877.472.0711 * 406.442.0711 * FAX 406.442.0712 * helena@energylab.com

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B		Analytical Run: 1SATURN_080622B							
Sample ID: CCV062208A	Continuing Calibration Verification Standard								06/22/08 11:11
Acetone	46.0	ug/L	20	92	70	130			
Acrylonitrile	42.4	ug/L	20	85	70	130			
Benzene	5.12	ug/L	1.0	102	70	130			
Bromochloromethane	4.36	ug/L	1.0	87	70	130			
Bromodichloromethane	4.64	ug/L	1.0	93	70	130			
Bromoform	4.12	ug/L	1.0	82	70	130			
Bromomethane	4.32	ug/L	1.0	86	70	130			
Carbon disulfide	5.48	ug/L	1.0	110	70	130			
Carbon tetrachloride	4.80	ug/L	1.0	96	70	130			
Chlorobenzene	4.80	ug/L	1.0	96	70	130			
Chlorodibromomethane	4.32	ug/L	1.0	86	70	130			
Chloroethane	4.92	ug/L	1.0	98	70	130			
Chloroform	4.48	ug/L	1.0	90	80	120			
Chloromethane	4.64	ug/L	1.0	93	70	130			
1,2-Dibromo-3-chloropropane	4.08	ug/L	1.0	82	70	130			
1,2-Dibromoethane	4.52	ug/L	1.0	90	70	130			
Dibromomethane	4.24	ug/L	1.0	85	70	130			
1,2-Dichlorobenzene	4.44	ug/L	1.0	89	70	130			
1,4-Dichlorobenzene	4.32	ug/L	1.0	86	70	130			
trans-1,4-Dichloro-2-butene	4.28	ug/L	1.0	86	70	130			
Dichlorodifluoromethane	4.68	ug/L	1.0	94	70	130			
1,1-Dichloroethane	4.56	ug/L	1.0	91	70	130			
1,2-Dichloroethane	4.08	ug/L	1.0	82	70	130			
1,1-Dichloroethene	4.84	ug/L	1.0	97	80	120			
cis-1,2-Dichloroethene	4.48	ug/L	1.0	90	70	130			
trans-1,2-Dichloroethene	4.84	ug/L	1.0	97	70	130			
1,2-Dichloropropane	5.44	ug/L	1.0	109	80	120			
cis-1,3-Dichloropropene	5.12	ug/L	1.0	102	70	130			
trans-1,3-Dichloropropene	4.96	ug/L	1.0	99	70	130			
Ethylbenzene	5.00	ug/L	1.0	100	80	120			
2-Hexanone	51.6	ug/L	20	103	70	130			
Iodomethane	4.80	ug/L	1.0	96	70	130			
Methyl ethyl ketone	44.8	ug/L	20	90	70	130			
Methyl isobutyl ketone	52.8	ug/L	20	106	70	130			
Methylene chloride	3.66	ug/L	1.0	73	70	130			
Styrene	5.20	ug/L	1.0	104	70	130			
1,1,1,2-Tetrachloroethane	4.92	ug/L	1.0	98	70	130			
1,1,2,2-Tetrachloroethane	4.12	ug/L	1.0	82	70	130			
Tetrachloroethene	4.88	ug/L	1.0	98	70	130			
Toluene	4.92	ug/L	1.0	98	80	120			
1,1,1-Trichloroethane	4.92	ug/L	1.0	98	70	130			
1,1,2-Trichloroethane	5.12	ug/L	1.0	102	70	130			
Trichloroethene	5.08	ug/L	1.0	102	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B		Analytical Run: 1SATURN_080622B							
Sample ID: CCV062208A	Continuing Calibration Verification Standard								06/22/08 11:11
Trichlorofluoromethane	4.60	ug/L	1.0	92	70	130			
1,2,3-Trichloropropane	4.96	ug/L	1.0	99	70	130			
Vinyl acetate	3.98	ug/L	1.0	80	70	130			
Vinyl chloride	4.40	ug/L	1.0	88	80	120			
m+p-Xylenes	9.32	ug/L	1.0	93	70	130			
o-Xylene	4.60	ug/L	1.0	92	70	130			
Xylenes, Total	13.9	ug/L	1.0	93	70	130			
Surr: 1,2-Dichloroethane-d4			1.0	95	70	130			
Surr: Dibromofluoromethane			1.0	97	70	130			
Surr: p-Bromofluorobenzene			1.0	90	70	130			
Surr: Toluene-d8			1.0	102	70	130			
Sample ID: CCV062408C	Continuing Calibration Verification Standard								06/24/08 09:27
Acetone	43.6	ug/L	20	87	70	130			
Acrylonitrile	39.1	ug/L	20	78	70	130			
Benzene	5.00	ug/L	1.0	100	70	130			
Bromochloromethane	4.08	ug/L	1.0	82	70	130			
Bromodichloromethane	4.20	ug/L	1.0	84	70	130			
Bromoform	4.20	ug/L	1.0	84	70	130			
Bromomethane	4.36	ug/L	1.0	87	70	130			
Carbon disulfide	5.24	ug/L	1.0	105	70	130			
Carbon tetrachloride	4.52	ug/L	1.0	90	70	130			
Chlorobenzene	4.68	ug/L	1.0	94	70	130			
Chlorodibromomethane	4.20	ug/L	1.0	84	70	130			
Chloroethane	5.20	ug/L	1.0	104	70	130			
Chloroform	4.08	ug/L	1.0	82	80	120			
Chloromethane	4.36	ug/L	1.0	87	70	130			
1,2-Dibromo-3-chloropropane	4.00	ug/L	1.0	80	70	130			
1,2-Dibromoethane	4.48	ug/L	1.0	90	70	130			
Dibromomethane	4.28	ug/L	1.0	86	70	130			
1,2-Dichlorobenzene	4.48	ug/L	1.0	90	70	130			
1,4-Dichlorobenzene	4.52	ug/L	1.0	90	70	130			
trans-1,4-Dichloro-2-butene	4.40	ug/L	1.0	88	70	130			
Dichlorodifluoromethane	4.32	ug/L	1.0	86	70	130			
1,1-Dichloroethane	4.36	ug/L	1.0	87	70	130			
1,2-Dichloroethane	3.75	ug/L	1.0	75	70	130			
1,1-Dichloroethene	4.56	ug/L	1.0	91	80	120			
cis-1,2-Dichloroethene	4.16	ug/L	1.0	83	70	130			
trans-1,2-Dichloroethene	4.76	ug/L	1.0	95	70	130			
1,2-Dichloropropane	5.12	ug/L	1.0	102	80	120			
cis-1,3-Dichloropropene	4.88	ug/L	1.0	98	70	130			
trans-1,3-Dichloropropene	5.16	ug/L	1.0	103	70	130			
Ethylbenzene	4.92	ug/L	1.0	98	80	120			

Qualifiers:

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ENERGY LABORATORIES, INC. * 3161 E Lyndale (59604) * PO Box 5688 * Helena, MT 59601
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QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B		Analytical Run: 1SATURN_080622B							
Sample ID: CCV062408C	Continuing Calibration Verification Standard								06/24/08 09:27
2-Hexanone	45.2	ug/L	20	90	70	130			
Iodomethane	4.40	ug/L	1.0	88	70	130			
Methyl ethyl ketone	39.0	ug/L	20	78	70	130			
Methyl isobutyl ketone	44.0	ug/L	20	88	70	130			
Methylene chloride	3.52	ug/L	1.0	70	70	130			
Styrene	5.04	ug/L	1.0	101	70	130			
1,1,1,2-Tetrachloroethane	4.84	ug/L	1.0	97	70	130			
1,1,2,2-Tetrachloroethane	3.88	ug/L	1.0	78	70	130			
Tetrachloroethene	5.24	ug/L	1.0	105	70	130			
Toluene	4.92	ug/L	1.0	98	80	120			
1,1,1-Trichloroethane	4.76	ug/L	1.0	95	70	130			
1,1,2-Trichloroethane	4.92	ug/L	1.0	98	70	130			
Trichloroethene	5.08	ug/L	1.0	102	70	130			
Trichlorofluoromethane	4.96	ug/L	1.0	99	70	130			
1,2,3-Trichloropropane	4.36	ug/L	1.0	87	70	130			
Vinyl acetate	4.04	ug/L	1.0	81	70	130			
Vinyl chloride	4.20	ug/L	1.0	84	80	120			
m+p-Xylenes	9.24	ug/L	1.0	92	70	130			
o-Xylene	4.92	ug/L	1.0	98	70	130			
Xylenes, Total	14.2	ug/L	1.0	94	70	130			
Surr: 1,2-Dichloroethane-d4			1.0	86	70	130			
Surr: Dibromofluoromethane			1.0	94	70	130			
Surr: p-Bromofluorobenzene			1.0	92	70	130			
Surr: Toluene-d8			1.0	100	70	130			
Method: SW8260B		Batch: R46084							
Sample ID: LCS062208A	Laboratory Control Sample								Run: 1SATURN_080622B
Acetone	44.8	ug/L	20	90	70	130			06/22/08 11:50
Acrylonitrile	39.8	ug/L	20	80	70	130			
Benzene	5.04	ug/L	1.0	101	70	130			
Bromochloromethane	4.40	ug/L	1.0	88	70	130			
Bromodichloromethane	4.36	ug/L	1.0	87	70	130			
Bromoform	4.32	ug/L	1.0	86	70	130			
Bromomethane	4.56	ug/L	1.0	91	70	130			
Carbon disulfide	5.12	ug/L	1.0	102	70	130			
Carbon tetrachloride	4.60	ug/L	1.0	92	70	130			
Chlorobenzene	4.88	ug/L	1.0	98	70	130			
Chlorodibromomethane	4.52	ug/L	1.0	90	70	130			
Chloroethane	5.28	ug/L	1.0	106	70	130			
Chloroform	4.24	ug/L	1.0	85	70	130			
Chloromethane	4.56	ug/L	1.0	91	70	130			
1,2-Dibromo-3-chloropropane	4.00	ug/L	1.0	80	70	130			
1,2-Dibromoethane	5.16	ug/L	1.0	103	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46084		
Sample ID: LCS062208A	Laboratory Control Sample			Run: 1SATURN_080622B			06/22/08 11:50		
Dibromomethane	4.40	ug/L	1.0	88	70	130			
1,2-Dichlorobenzene	4.96	ug/L	1.0	99	70	130			
1,4-Dichlorobenzene	4.84	ug/L	1.0	97	70	130			
trans-1,4-Dichloro-2-butene	4.20	ug/L	1.0	84	70	130			
Dichlorodifluoromethane	4.32	ug/L	1.0	86	70	130			
1,1-Dichloroethane	4.40	ug/L	1.0	88	70	130			
1,2-Dichloroethane	3.97	ug/L	1.0	79	70	130			
1,1-Dichloroethene	4.60	ug/L	1.0	92	70	130			
cis-1,2-Dichloroethene	4.28	ug/L	1.0	86	70	130			
trans-1,2-Dichloroethene	5.00	ug/L	1.0	100	70	130			
1,2-Dichloropropane	5.52	ug/L	1.0	110	70	130			
cis-1,3-Dichloropropene	5.20	ug/L	1.0	104	70	130			
trans-1,3-Dichloropropene	5.36	ug/L	1.0	107	70	130			
Ethylbenzene	5.12	ug/L	1.0	102	70	130			
2-Hexanone	48.0	ug/L	20	96	70	130			
Iodomethane	4.32	ug/L	1.0	86	70	130			
Methyl ethyl ketone	42.8	ug/L	20	86	70	130			
Methyl isobutyl ketone	49.6	ug/L	20	99	70	130			
Methylene chloride	3.74	ug/L	1.0	75	70	130			
Styrene	5.04	ug/L	1.0	101	70	130			
1,1,1,2-Tetrachloroethane	5.28	ug/L	1.0	106	70	130			
1,1,2,2-Tetrachloroethane	4.28	ug/L	1.0	86	70	130			
Tetrachloroethene	5.20	ug/L	1.0	104	70	130			
Toluene	5.04	ug/L	1.0	101	70	130			
1,1,1-Trichloroethane	4.80	ug/L	1.0	96	70	130			
1,1,2-Trichloroethane	4.92	ug/L	1.0	98	70	130			
Trichloroethene	5.20	ug/L	1.0	104	70	130			
Trichlorofluoromethane	5.16	ug/L	1.0	103	70	130			
1,2,3-Trichloropropane	4.48	ug/L	1.0	90	70	130			
Vinyl acetate	3.87	ug/L	1.0	77	70	130			
Vinyl chloride	4.48	ug/L	1.0	90	70	130			
m+p-Xylenes	9.52	ug/L	1.0	95	70	130			
o-Xylene	4.84	ug/L	1.0	97	70	130			
Xylenes, Total	14.4	ug/L	1.0	96	70	130			
Surr: 1,2-Dichloroethane-d4			1.0	90	70	130			
Surr: Dibromofluoromethane			1.0	92	70	130			
Surr: p-Bromofluorobenzene			1.0	89	70	130			
Surr: Toluene-d8			1.0	99	70	130			
Sample ID: MBLK062208A	Method Blank			Run: 1SATURN_080622B			06/22/08 13:05		
Acetone	ND	ug/L	20						
Acrylonitrile	ND	ug/L	20						
Benzene	ND	ug/L	1.0						

Qualifiers:

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QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B									Batch: R46084
Sample ID: MBLK062208A	Method Blank		Run: 1SATURN_080622B					06/22/08 13:05	
Bromochloromethane	ND	ug/L	1.0						
Bromodichloromethane	ND	ug/L	1.0						
Bromoform	ND	ug/L	1.0						
Bromomethane	ND	ug/L	1.0						
Carbon disulfide	ND	ug/L	1.0						
Carbon tetrachloride	ND	ug/L	1.0						
Chlorobenzene	ND	ug/L	1.0						
Chlorodibromomethane	ND	ug/L	1.0						
Chloroethane	ND	ug/L	1.0						
Chloroform	ND	ug/L	1.0						
Chloromethane	ND	ug/L	1.0						
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0						
1,2-Dibromoethane	ND	ug/L	1.0						
Dibromomethane	ND	ug/L	1.0						
1,2-Dichlorobenzene	ND	ug/L	1.0						
1,4-Dichlorobenzene	ND	ug/L	1.0						
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0						
Dichlorodifluoromethane	ND	ug/L	1.0						
1,1-Dichloroethane	ND	ug/L	1.0						
1,2-Dichloroethane	ND	ug/L	1.0						
1,1-Dichloroethene	ND	ug/L	1.0						
cis-1,2-Dichloroethene	ND	ug/L	1.0						
trans-1,2-Dichloroethene	ND	ug/L	1.0						
1,2-Dichloropropane	ND	ug/L	1.0						
cis-1,3-Dichloropropene	ND	ug/L	1.0						
trans-1,3-Dichloropropene	ND	ug/L	1.0						
Ethylbenzene	ND	ug/L	1.0						
2-Hexanone	ND	ug/L	20						
Iodomethane	ND	ug/L	1.0						
Methyl ethyl ketone	ND	ug/L	20						
Methyl isobutyl ketone	ND	ug/L	20						
Methylene chloride	ND	ug/L	1.0						
Styrene	ND	ug/L	1.0						
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0						
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0						
Tetrachloroethene	ND	ug/L	1.0						
Toluene	ND	ug/L	1.0						
1,1,1-Trichloroethane	ND	ug/L	1.0						
1,1,2-Trichloroethane	ND	ug/L	1.0						
Trichloroethene	ND	ug/L	1.0						
Trichlorofluoromethane	ND	ug/L	1.0						
1,2,3-Trichloropropane	ND	ug/L	1.0						
Vinyl acetate	ND	ug/L	1.0						

Qualifiers:

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QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46084		
Sample ID: MBLK062208A	Method Blank		Run: 1SATURN_080622B				06/22/08 13:05		
Vinyl chloride	ND	ug/L	1.0						
m+p-Xylenes	ND	ug/L	1.0						
o-Xylene	ND	ug/L	1.0						
Xylenes, Total	ND	ug/L	1.0						
Surr: 1,2-Dichloroethane-d4			1.0	91	70	130			
Surr: Dibromofluoromethane			1.0	97	70	130			
Surr: p-Bromofluorobenzene			1.0	87	70	130			
Surr: Toluene-d8			1.0	98	70	130			
Sample ID: LCS062408A	Laboratory Control Sample		Run: 1SATURN_080622B				06/24/08 10:09		
Acetone	52.4	ug/L	20	105	70	130			
Acrylonitrile	41.6	ug/L	20	83	70	130			
Benzene	5.28	ug/L	1.0	106	70	130			
Bromochloromethane	4.56	ug/L	1.0	91	70	130			
Bromodichloromethane	4.88	ug/L	1.0	98	70	130			
Bromoform	4.40	ug/L	1.0	88	70	130			
Bromomethane	4.84	ug/L	1.0	97	70	130			
Carbon disulfide	5.56	ug/L	1.0	111	70	130			
Carbon tetrachloride	4.96	ug/L	1.0	99	70	130			
Chlorobenzene	5.04	ug/L	1.0	101	70	130			
Chlorodibromomethane	4.48	ug/L	1.0	90	70	130			
Chloroethane	5.48	ug/L	1.0	110	70	130			
Chloroform	4.48	ug/L	1.0	90	70	130			
Chloromethane	4.64	ug/L	1.0	93	70	130			
1,2-Dibromo-3-chloropropane	4.24	ug/L	1.0	85	70	130			
1,2-Dibromoethane	4.80	ug/L	1.0	96	70	130			
Dibromomethane	4.32	ug/L	1.0	86	70	130			
1,2-Dichlorobenzene	4.56	ug/L	1.0	91	70	130			
1,4-Dichlorobenzene	4.56	ug/L	1.0	91	70	130			
trans-1,4-Dichloro-2-butene	4.24	ug/L	1.0	85	70	130			
Dichlorodifluoromethane	4.40	ug/L	1.0	88	70	130			
1,1-Dichloroethane	4.76	ug/L	1.0	95	70	130			
1,2-Dichloroethane	4.36	ug/L	1.0	87	70	130			
1,1-Dichloroethene	4.72	ug/L	1.0	94	70	130			
cis-1,2-Dichloroethene	4.56	ug/L	1.0	91	70	130			
trans-1,2-Dichloroethene	4.96	ug/L	1.0	99	70	130			
1,2-Dichloropropane	5.44	ug/L	1.0	109	70	130			
cis-1,3-Dichloropropene	5.12	ug/L	1.0	102	70	130			
trans-1,3-Dichloropropene	5.84	ug/L	1.0	117	70	130			
Ethylbenzene	5.28	ug/L	1.0	106	70	130			
2-Hexanone	53.6	ug/L	20	107	70	130			
Iodomethane	4.68	ug/L	1.0	94	70	130			
Methyl ethyl ketone	46.4	ug/L	20	93	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46084		
Sample ID: LCS062408A	Laboratory Control Sample			Run: 1SATURN_080622B			06/24/08 10:09		
Methyl isobutyl ketone	51.6	ug/L	20	103	70	130			
Methylene chloride	3.94	ug/L	1.0	79	70	130			
Styrene	5.08	ug/L	1.0	102	70	130			
1,1,1,2-Tetrachloroethane	5.12	ug/L	1.0	102	70	130			
1,1,2,2-Tetrachloroethane	4.20	ug/L	1.0	84	70	130			
Tetrachloroethene	5.28	ug/L	1.0	106	70	130			
Toluene	5.32	ug/L	1.0	106	70	130			
1,1,1-Trichloroethane	5.08	ug/L	1.0	102	70	130			
1,1,2-Trichloroethane	5.12	ug/L	1.0	102	70	130			
Trichloroethene	5.40	ug/L	1.0	108	70	130			
Trichlorofluoromethane	5.08	ug/L	1.0	102	70	130			
1,2,3-Trichloropropane	4.32	ug/L	1.0	86	70	130			
Vinyl acetate	4.04	ug/L	1.0	81	70	130			
Vinyl chloride	4.40	ug/L	1.0	88	70	130			
m+p-Xylenes	9.52	ug/L	1.0	95	70	130			
o-Xylene	5.20	ug/L	1.0	104	70	130			
Xylenes, Total	14.7	ug/L	1.0	98	70	130			
Surr: 1,2-Dichloroethane-d4			1.0	84	70	130			
Surr: Dibromofluoromethane			1.0	98	70	130			
Surr: p-Bromofluorobenzene			1.0	86	70	130			
Surr: Toluene-d8			1.0	98	70	130			
Sample ID: MBLK062408A	Method Blank			Run: 1SATURN_080622B			06/24/08 11:20		
Acetone	ND	ug/L	20						
Acrylonitrile	ND	ug/L	20						
Benzene	ND	ug/L	1.0						
Bromochloromethane	ND	ug/L	1.0						
Bromodichloromethane	ND	ug/L	1.0						
Bromoform	ND	ug/L	1.0						
Bromomethane	ND	ug/L	1.0						
Carbon disulfide	ND	ug/L	1.0						
Carbon tetrachloride	ND	ug/L	1.0						
Chlorobenzene	ND	ug/L	1.0						
Chlorodibromomethane	ND	ug/L	1.0						
Chloroethane	ND	ug/L	1.0						
Chloroform	ND	ug/L	1.0						
Chloromethane	ND	ug/L	1.0						
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0						
1,2-Dibromoethane	ND	ug/L	1.0						
Dibromomethane	ND	ug/L	1.0						
1,2-Dichlorobenzene	ND	ug/L	1.0						
1,4-Dichlorobenzene	ND	ug/L	1.0						
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



ENERGY LABORATORIES, INC. * 3161 E Lyndale (59604) * PO Box 5688 * Helena, MT 59601
Toll Free 877.472.0711 * 406.442.0711 * FAX 406.442.0712 * helena@energylab.com

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46084		
Sample ID: MBLK062408A	Method Blank		Run: 1SATURN_080622B				06/24/08 11:20		
Dichlorodifluoromethane	ND	ug/L	1.0						
1,1-Dichloroethane	ND	ug/L	1.0						
1,2-Dichloroethane	ND	ug/L	1.0						
1,1-Dichloroethene	ND	ug/L	1.0						
cis-1,2-Dichloroethene	ND	ug/L	1.0						
trans-1,2-Dichloroethene	ND	ug/L	1.0						
1,2-Dichloropropane	ND	ug/L	1.0						
cis-1,3-Dichloropropene	ND	ug/L	1.0						
trans-1,3-Dichloropropene	ND	ug/L	1.0						
Ethylbenzene	ND	ug/L	1.0						
2-Hexanone	ND	ug/L	20						
Iodomethane	ND	ug/L	1.0						
Methyl ethyl ketone	ND	ug/L	20						
Methyl isobutyl ketone	ND	ug/L	20						
Methylene chloride	ND	ug/L	1.0						
Styrene	ND	ug/L	1.0						
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0						
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0						
Tetrachloroethene	ND	ug/L	1.0						
Toluene	ND	ug/L	1.0						
1,1,1-Trichloroethane	ND	ug/L	1.0						
1,1,2-Trichloroethane	ND	ug/L	1.0						
Trichloroethene	ND	ug/L	1.0						
Trichlorofluoromethane	ND	ug/L	1.0						
1,2,3-Trichloropropane	ND	ug/L	1.0						
Vinyl acetate	ND	ug/L	1.0						
Vinyl chloride	ND	ug/L	1.0						
m+p-Xylenes	ND	ug/L	1.0						
o-Xylene	ND	ug/L	1.0						
Xylenes, Total	ND	ug/L	1.0						
Surr: 1,2-Dichloroethane-d4			1.0	93	70	130			
Surr: Dibromofluoromethane			1.0	100	70	130			
Surr: p-Bromofluorobenzene			1.0	88	70	130			
Surr: Toluene-d8			1.0	100	70	130			
Sample ID: H08060387-002EMS	Sample Matrix Spike		Run: 1SATURN_080622B				06/24/08 17:30		
Acetone	92.0	ug/L	40	92	70	130			
Acrylonitrile	88.8	ug/L	40	89	70	130			
Benzene	11.0	ug/L	2.0	110	70	130			
Bromochloromethane	9.28	ug/L	2.0	93	70	130			
Bromodichloromethane	10.7	ug/L	2.0	107	70	130			
Bromoform	9.36	ug/L	2.0	94	70	130			
Bromomethane	8.96	ug/L	2.0	90	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46084		
Sample ID: H08060387-002EMS	Sample Matrix Spike		Run: 1SATURN_080622B				06/24/08 17:30		
Carbon disulfide	10.4	ug/L	2.0	104	70	130			
Carbon tetrachloride	10.0	ug/L	2.0	100	70	130			
Chlorobenzene	10.9	ug/L	2.0	109	70	130			
Chlorodibromomethane	9.12	ug/L	2.0	91	70	130			
Chloroethane	8.72	ug/L	2.0	87	70	130			
Chloroform	9.28	ug/L	2.0	93	70	130			
Chloromethane	6.47	ug/L	2.0	65	70	130			S
1,2-Dibromo-3-chloropropane	9.20	ug/L	2.0	92	70	130			
1,2-Dibromoethane	10.1	ug/L	2.0	101	70	130			
Dibromomethane	11.3	ug/L	2.0	113	70	130			
1,2-Dichlorobenzene	10.6	ug/L	2.0	106	70	130			
1,4-Dichlorobenzene	9.44	ug/L	2.0	94	70	130			
trans-1,4-Dichloro-2-butene	8.24	ug/L	2.0	82	70	130			
Dichlorodifluoromethane	7.85	ug/L	2.0	78	70	130			
1,1-Dichloroethane	9.76	ug/L	2.0	98	70	130			
1,2-Dichloroethane	9.36	ug/L	2.0	94	70	130			
1,1-Dichloroethene	9.84	ug/L	2.0	98	70	130			
cis-1,2-Dichloroethene	10.1	ug/L	2.0	101	70	130			
trans-1,2-Dichloroethene	10.9	ug/L	2.0	109	70	130			
1,2-Dichloropropane	12.7	ug/L	2.0	127	70	130			
cis-1,3-Dichloropropene	12.3	ug/L	2.0	123	70	130			
trans-1,3-Dichloropropene	12.4	ug/L	2.0	124	70	130			
Ethylbenzene	11.4	ug/L	2.0	114	70	130			
2-Hexanone	127	ug/L	40	127	70	130			
Iodomethane	10.1	ug/L	2.0	101	70	130			
Methyl ethyl ketone	96.0	ug/L	40	96	70	130			
Methyl isobutyl ketone	120	ug/L	40	120	70	130			
Methylene chloride	8.32	ug/L	2.0	83	70	130			
Styrene	11.8	ug/L	2.0	118	70	130			
1,1,1,2-Tetrachloroethane	12.1	ug/L	2.0	121	70	130			
1,1,2,2-Tetrachloroethane	9.28	ug/L	2.0	93	70	130			
Tetrachloroethene	11.5	ug/L	2.0	115	70	130			
Toluene	12.0	ug/L	2.0	120	70	130			
1,1,1-Trichloroethane	10.6	ug/L	2.0	106	70	130			
1,1,2-Trichloroethane	11.8	ug/L	2.0	118	70	130			
Trichloroethene	11.7	ug/L	2.0	117	70	130			
Trichlorofluoromethane	9.28	ug/L	2.0	93	70	130			
1,2,3-Trichloropropane	8.48	ug/L	2.0	85	70	130			
Vinyl acetate	7.98	ug/L	2.0	80	70	130			
Vinyl chloride	8.48	ug/L	2.0	85	70	130			
m+p-Xylenes	21.9	ug/L	2.0	110	70	130			
o-Xylene	11.2	ug/L	2.0	112	70	130			
Xylenes, Total	33.1	ug/L	2.0	110	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

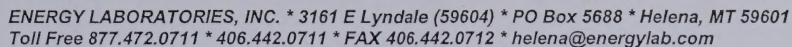
Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B									Batch: R46084
Sample ID: H08060387-002EMS	Sample Matrix Spike		Run: 1SATURN_080622B					06/24/08 17:30	
Surr: 1,2-Dichloroethane-d4			2.0	90	70	130			
Surr: Dibromofluoromethane			2.0	95	70	130			
Surr: p-Bromofluorobenzene			2.0	84	70	130			
Surr: Toluene-d8			2.0	107	70	130			
Sample ID: H08060387-002EMSD	Sample Matrix Spike Duplicate		Run: 1SATURN_080622B					06/24/08 17:59	
Acetone	91.2	ug/L	40	91	70	130	0.9	20	
Acrylonitrile	92.8	ug/L	40	93	70	130	4.4	20	
Benzene	10.7	ug/L	2.0	107	70	130	2.9	20	
Bromochloromethane	8.64	ug/L	2.0	86	70	130	7.1	20	
Bromodichloromethane	11.0	ug/L	2.0	110	70	130	2.2	20	
Bromoform	9.76	ug/L	2.0	98	70	130	4.2	20	
Bromomethane	8.80	ug/L	2.0	88	70	130	1.8	20	
Carbon disulfide	10.2	ug/L	2.0	102	70	130	1.6	20	
Carbon tetrachloride	9.76	ug/L	2.0	98	70	130	2.4	20	
Chlorobenzene	10.7	ug/L	2.0	107	70	130	1.5	20	
Chlorodibromomethane	9.68	ug/L	2.0	97	70	130	6.0	20	
Chloroethane	9.36	ug/L	2.0	94	70	130	7.1	20	
Chloroform	8.88	ug/L	2.0	89	70	130	4.4	20	
Chloromethane	7.39	ug/L	2.0	74	70	130	13	20	
1,2-Dibromo-3-chloropropane	9.60	ug/L	2.0	96	70	130	4.3	20	
1,2-Dibromoethane	11.2	ug/L	2.0	112	70	130	11	20	
Dibromomethane	11.2	ug/L	2.0	112	70	130	0.7	20	
1,2-Dichlorobenzene	10.4	ug/L	2.0	104	70	130	1.5	20	
1,4-Dichlorobenzene	10.0	ug/L	2.0	100	70	130	5.8	20	
trans-1,4-Dichloro-2-butene	8.96	ug/L	2.0	90	70	130	8.4	20	
Dichlorodifluoromethane	8.16	ug/L	2.0	82	70	130	3.9	20	
1,1-Dichloroethane	9.36	ug/L	2.0	94	70	130	4.2	20	
1,2-Dichloroethane	8.96	ug/L	2.0	90	70	130	4.4	20	
1,1-Dichloroethene	9.52	ug/L	2.0	95	70	130	3.3	20	
cis-1,2-Dichloroethene	9.44	ug/L	2.0	94	70	130	6.6	20	
trans-1,2-Dichloroethene	10.2	ug/L	2.0	102	70	130	6.8	20	
1,2-Dichloropropane	12.7	ug/L	2.0	127	70	130	0.0	20	
cis-1,3-Dichloropropene	11.8	ug/L	2.0	118	70	130	4.7	20	
trans-1,3-Dichloropropene	11.9	ug/L	2.0	119	70	130	3.9	20	
Ethylbenzene	10.9	ug/L	2.0	109	70	130	5.0	20	
2-Hexanone	118	ug/L	40	118	70	130	7.8	20	
Iodomethane	9.44	ug/L	2.0	94	70	130	6.6	20	
Methyl ethyl ketone	87.2	ug/L	40	87	70	130	9.6	20	
Methyl isobutyl ketone	109	ug/L	40	109	70	130	9.8	20	
Methylene chloride	8.16	ug/L	2.0	82	70	130	1.9	20	
Styrene	12.0	ug/L	2.0	120	70	130	2.0	20	
1,1,1,2-Tetrachloroethane	11.4	ug/L	2.0	114	70	130	6.1	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



ENERGY LABORATORIES, INC. * 3161 E Lyndale (59604) * PO Box 5688 * Helena, MT 59601
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QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B			Analytical Run: 1SATURN_080623A						
Sample ID: CCV062308A	Continuing Calibration Verification Standard								06/23/08 09:12
Acetone	46.4	ug/L	20	93	70	130			
Acrylonitrile	41.2	ug/L	20	82	70	130			
Benzene	5.68	ug/L	1.0	114	70	130			
Bromochloromethane	4.84	ug/L	1.0	97	70	130			
Bromodichloromethane	5.12	ug/L	1.0	102	70	130			
Bromoform	4.96	ug/L	1.0	99	70	130			
Bromomethane	4.40	ug/L	1.0	88	70	130			
Carbon disulfide	5.68	ug/L	1.0	114	70	130			
Carbon tetrachloride	5.12	ug/L	1.0	102	70	130			
Chlorobenzene	5.16	ug/L	1.0	103	70	130			
Chlorodibromomethane	5.20	ug/L	1.0	104	70	130			
Chloroethane	5.24	ug/L	1.0	105	70	130			
Chloroform	4.88	ug/L	1.0	98	80	120			
Chloromethane	5.24	ug/L	1.0	105	70	130			
1,2-Dibromo-3-chloropropane	3.99	ug/L	1.0	80	70	130			
1,2-Dibromoethane	5.76	ug/L	1.0	115	70	130			
Dibromomethane	5.08	ug/L	1.0	102	70	130			
1,2-Dichlorobenzene	5.16	ug/L	1.0	103	70	130			
1,4-Dichlorobenzene	4.88	ug/L	1.0	98	70	130			
trans-1,4-Dichloro-2-butene	5.20	ug/L	1.0	104	70	130			
Dichlorodifluoromethane	4.92	ug/L	1.0	98	70	130			
1,1-Dichloroethane	5.12	ug/L	1.0	102	70	130			
1,2-Dichloroethane	4.36	ug/L	1.0	87	70	130			
1,1-Dichloroethene	4.88	ug/L	1.0	98	80	120			
cis-1,2-Dichloroethene	4.96	ug/L	1.0	99	70	130			
trans-1,2-Dichloroethene	5.16	ug/L	1.0	103	70	130			
1,2-Dichloropropane	5.76	ug/L	1.0	115	80	120			
cis-1,3-Dichloropropene	5.88	ug/L	1.0	118	70	130			
trans-1,3-Dichloropropene	5.56	ug/L	1.0	111	70	130			
Ethylbenzene	5.52	ug/L	1.0	110	80	120			
2-Hexanone	48.4	ug/L	20	97	70	130			
Iodomethane	4.92	ug/L	1.0	98	70	130			
Methyl ethyl ketone	43.6	ug/L	20	87	70	130			
Methyl isobutyl ketone	48.8	ug/L	20	98	70	130			
Methylene chloride	4.00	ug/L	1.0	80	70	130			
Styrene	5.32	ug/L	1.0	106	70	130			
1,1,1,2-Tetrachloroethane	5.76	ug/L	1.0	115	70	130			
1,1,2,2-Tetrachloroethane	4.64	ug/L	1.0	93	70	130			
Tetrachloroethene	5.76	ug/L	1.0	115	70	130			
Toluene	5.60	ug/L	1.0	112	80	120			
1,1,1-Trichloroethane	5.48	ug/L	1.0	110	70	130			
1,1,2-Trichloroethane	5.40	ug/L	1.0	108	70	130			
Trichloroethene	6.00	ug/L	1.0	120	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B			Analytical Run: 1SATURN_080623A						
Sample ID: CCV062308A	Continuing Calibration Verification Standard								06/23/08 09:12
Trichlorofluoromethane	4.84	ug/L	1.0	97	70	130			
1,2,3-Trichloropropane	5.44	ug/L	1.0	109	70	130			
Vinyl acetate	4.08	ug/L	1.0	82	70	130			
Vinyl chloride	4.76	ug/L	1.0	95	80	120			
m+p-Xylenes	10.4	ug/L	1.0	104	70	130			
o-Xylene	5.24	ug/L	1.0	105	70	130			
Xylenes, Total	15.6	ug/L	1.0	104	70	130			
Surr: 1,2-Dichloroethane-d4			1.0	82	70	130			
Surr: Dibromofluoromethane			1.0	97	70	130			
Surr: p-Bromofluorobenzene			1.0	86	70	130			
Surr: Toluene-d8			1.0	99	70	130			
Sample ID: CCV062408C	Continuing Calibration Verification Standard								06/24/08 09:27
Acetone	43.6	ug/L	20	87	70	130			
Acrylonitrile	39.1	ug/L	20	78	70	130			
Benzene	5.00	ug/L	1.0	100	70	130			
Bromochloromethane	4.08	ug/L	1.0	82	70	130			
Bromodichloromethane	4.20	ug/L	1.0	84	70	130			
Bromoform	4.20	ug/L	1.0	84	70	130			
Bromomethane	4.36	ug/L	1.0	87	70	130			
Carbon disulfide	5.24	ug/L	1.0	105	70	130			
Carbon tetrachloride	4.52	ug/L	1.0	90	70	130			
Chlorobenzene	4.68	ug/L	1.0	94	70	130			
Chlorodibromomethane	4.20	ug/L	1.0	84	70	130			
Chloroethane	5.20	ug/L	1.0	104	70	130			
Chloroform	4.08	ug/L	1.0	82	80	120			
Chloromethane	4.36	ug/L	1.0	87	70	130			
1,2-Dibromo-3-chloropropane	4.00	ug/L	1.0	80	70	130			
1,2-Dibromoethane	4.48	ug/L	1.0	90	70	130			
Dibromomethane	4.28	ug/L	1.0	86	70	130			
1,2-Dichlorobenzene	4.48	ug/L	1.0	90	70	130			
1,4-Dichlorobenzene	4.52	ug/L	1.0	90	70	130			
trans-1,4-Dichloro-2-butene	4.40	ug/L	1.0	88	70	130			
Dichlorodifluoromethane	4.32	ug/L	1.0	86	70	130			
1,1-Dichloroethane	4.36	ug/L	1.0	87	70	130			
1,2-Dichloroethane	3.75	ug/L	1.0	75	70	130			
1,1-Dichloroethene	4.56	ug/L	1.0	91	80	120			
cis-1,2-Dichloroethene	4.16	ug/L	1.0	83	70	130			
trans-1,2-Dichloroethene	4.76	ug/L	1.0	95	70	130			
1,2-Dichloropropane	5.12	ug/L	1.0	102	80	120			
cis-1,3-Dichloropropene	4.88	ug/L	1.0	98	70	130			
trans-1,3-Dichloropropene	5.16	ug/L	1.0	103	70	130			
Ethylbenzene	4.92	ug/L	1.0	98	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



ENERGY LABORATORIES, INC. * 3161 E Lyndale (59604) * PO Box 5688 * Helena, MT 59601
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QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
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Method: SW8260B

Analytical Run: 1SATURN_080623A

Sample ID: CCV062408C

Continuing Calibration Verification Standard

06/24/08 09:27

2-Hexanone	45.2	ug/L	20	90	70	130			
Iodomethane	4.40	ug/L	1.0	88	70	130			
Methyl ethyl ketone	39.0	ug/L	20	78	70	130			
Methyl isobutyl ketone	44.0	ug/L	20	88	70	130			
Methylene chloride	3.52	ug/L	1.0	70	70	130			
Styrene	5.04	ug/L	1.0	101	70	130			
1,1,1,2-Tetrachloroethane	4.84	ug/L	1.0	97	70	130			
1,1,2,2-Tetrachloroethane	3.88	ug/L	1.0	78	70	130			
Tetrachloroethene	5.24	ug/L	1.0	105	70	130			
Toluene	4.92	ug/L	1.0	98	80	120			
1,1,1-Trichloroethane	4.76	ug/L	1.0	95	70	130			
1,1,2-Trichloroethane	4.92	ug/L	1.0	98	70	130			
Trichloroethene	5.08	ug/L	1.0	102	70	130			
Trichlorofluoromethane	4.96	ug/L	1.0	99	70	130			
1,2,3-Trichloropropane	4.36	ug/L	1.0	87	70	130			
Vinyl acetate	4.04	ug/L	1.0	81	70	130			
Vinyl chloride	4.20	ug/L	1.0	84	80	120			
m+p-Xylenes	9.24	ug/L	1.0	92	70	130			
o-Xylene	4.92	ug/L	1.0	98	70	130			
Xylenes, Total	14.2	ug/L	1.0	94	70	130			
Surr: 1,2-Dichloroethane-d4			1.0	86	70	130			
Surr: Dibromofluoromethane			1.0	94	70	130			
Surr: p-Bromofluorobenzene			1.0	92	70	130			
Surr: Toluene-d8			1.0	100	70	130			

Method: SW8260B

Batch: R46118

Sample ID: LCS062308A

Laboratory Control Sample

Run: 1SATURN_080623A

06/23/08 10:01

Acetone	46.4	ug/L	20	93	70	130			
Acrylonitrile	45.6	ug/L	20	91	70	130			
Benzene	5.68	ug/L	1.0	114	70	130			
Bromochloromethane	4.96	ug/L	1.0	99	70	130			
Bromodichloromethane	4.68	ug/L	1.0	94	70	130			
Bromoform	4.56	ug/L	1.0	91	70	130			
Bromomethane	4.60	ug/L	1.0	92	70	130			
Carbon disulfide	5.76	ug/L	1.0	115	70	130			
Carbon tetrachloride	5.12	ug/L	1.0	102	70	130			
Chlorobenzene	5.08	ug/L	1.0	102	70	130			
Chlorodibromomethane	4.84	ug/L	1.0	97	70	130			
Chloroethane	5.28	ug/L	1.0	106	70	130			
Chloroform	4.80	ug/L	1.0	96	70	130			
Chloromethane	4.84	ug/L	1.0	97	70	130			
1,2-Dibromo-3-chloropropane	4.12	ug/L	1.0	82	70	130			
1,2-Dibromoethane	5.24	ug/L	1.0	105	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



ENERGY LABORATORIES, INC. * 3161 E Lyndale (59604) * PO Box 5688 * Helena, MT 59601
Toll Free 877.472.0711 * 406.442.0711 * FAX 406.442.0712 * helena@energylab.com

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46118		
Sample ID: LCS062308A	Laboratory Control Sample			Run: 1SATURN_080623A			06/23/08 10:01		
Dibromomethane	4.64	ug/L	1.0	93	70	130			
1,2-Dichlorobenzene	4.76	ug/L	1.0	95	70	130			
1,4-Dichlorobenzene	4.68	ug/L	1.0	94	70	130			
trans-1,4-Dichloro-2-butene	4.76	ug/L	1.0	95	70	130			
Dichlorodifluoromethane	4.20	ug/L	1.0	84	70	130			
1,1-Dichloroethane	5.08	ug/L	1.0	102	70	130			
1,2-Dichloroethane	4.60	ug/L	1.0	92	70	130			
1,1-Dichloroethene	4.76	ug/L	1.0	95	70	130			
cis-1,2-Dichloroethene	4.88	ug/L	1.0	98	70	130			
trans-1,2-Dichloroethene	5.12	ug/L	1.0	102	70	130			
1,2-Dichloropropane	5.60	ug/L	1.0	112	70	130			
cis-1,3-Dichloropropene	5.52	ug/L	1.0	110	70	130			
trans-1,3-Dichloropropene	5.84	ug/L	1.0	117	70	130			
Ethylbenzene	5.28	ug/L	1.0	106	70	130			
2-Hexanone	49.6	ug/L	20	99	70	130			
Iodomethane	5.08	ug/L	1.0	102	70	130			
Methyl ethyl ketone	46.0	ug/L	20	92	70	130			
Methyl isobutyl ketone	49.2	ug/L	20	98	70	130			
Methylene chloride	4.12	ug/L	1.0	82	70	130			
Styrene	5.12	ug/L	1.0	102	70	130			
1,1,1,2-Tetrachloroethane	5.44	ug/L	1.0	109	70	130			
1,1,2,2-Tetrachloroethane	4.20	ug/L	1.0	84	70	130			
Tetrachloroethene	5.32	ug/L	1.0	106	70	130			
Toluene	5.32	ug/L	1.0	106	70	130			
1,1,1-Trichloroethane	5.24	ug/L	1.0	105	70	130			
1,1,2-Trichloroethane	5.20	ug/L	1.0	104	70	130			
Trichloroethene	5.44	ug/L	1.0	109	70	130			
Trichlorofluoromethane	5.12	ug/L	1.0	102	70	130			
1,2,3-Trichloropropane	4.40	ug/L	1.0	88	70	130			
Vinyl acetate	4.60	ug/L	1.0	92	70	130			
Vinyl chloride	4.64	ug/L	1.0	93	70	130			
m+p-Xylenes	9.80	ug/L	1.0	98	70	130			
o-Xylene	5.20	ug/L	1.0	104	70	130			
Xylenes, Total	15.0	ug/L	1.0	100	70	130			
Surr: 1,2-Dichloroethane-d4			1.0	88	70	130			
Surr: Dibromofluoromethane			1.0	100	70	130			
Surr: p-Bromofluorobenzene			1.0	88	70	130			
Surr: Toluene-d8			1.0	95	70	130			
Sample ID: MBLK062308A	Method Blank			Run: 1SATURN_080623A			06/23/08 11:28		
Acetone	ND	ug/L	20						
Acrylonitrile	ND	ug/L	20						
Benzene	ND	ug/L	1.0						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



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QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46118		
Sample ID: MBLK062308A	Method Blank		Run: 1SATURN_080623A				06/23/08 11:28		
Bromochloromethane	ND	ug/L	1.0						
Bromodichloromethane	ND	ug/L	1.0						
Bromoform	ND	ug/L	1.0						
Bromomethane	ND	ug/L	1.0						
Carbon disulfide	ND	ug/L	1.0						
Carbon tetrachloride	ND	ug/L	1.0						
Chlorobenzene	ND	ug/L	1.0						
Chlorodibromomethane	ND	ug/L	1.0						
Chloroethane	ND	ug/L	1.0						
Chloroform	ND	ug/L	1.0						
Chloromethane	ND	ug/L	1.0						
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0						
1,2-Dibromoethane	ND	ug/L	1.0						
Dibromomethane	ND	ug/L	1.0						
1,2-Dichlorobenzene	ND	ug/L	1.0						
1,4-Dichlorobenzene	ND	ug/L	1.0						
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0						
Dichlorodifluoromethane	ND	ug/L	1.0						
1,1-Dichloroethane	ND	ug/L	1.0						
1,2-Dichloroethane	ND	ug/L	1.0						
1,1-Dichloroethene	ND	ug/L	1.0						
cis-1,2-Dichloroethene	ND	ug/L	1.0						
trans-1,2-Dichloroethene	ND	ug/L	1.0						
1,2-Dichloropropane	ND	ug/L	1.0						
cis-1,3-Dichloropropene	ND	ug/L	1.0						
trans-1,3-Dichloropropene	ND	ug/L	1.0						
Ethylbenzene	ND	ug/L	1.0						
2-Hexanone	ND	ug/L	20						
Iodomethane	ND	ug/L	1.0						
Methyl ethyl ketone	ND	ug/L	20						
Methyl isobutyl ketone	ND	ug/L	20						
Methylene chloride	ND	ug/L	1.0						
Styrene	ND	ug/L	1.0						
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0						
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0						
Tetrachloroethene	ND	ug/L	1.0						
Toluene	ND	ug/L	1.0						
1,1,1-Trichloroethane	ND	ug/L	1.0						
1,1,2-Trichloroethane	ND	ug/L	1.0						
Trichloroethene	ND	ug/L	1.0						
Trichlorofluoromethane	ND	ug/L	1.0						
1,2,3-Trichloropropane	ND	ug/L	1.0						
Vinyl acetate	ND	ug/L	1.0						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46118		
Sample ID: MBLK062308A	Method Blank		Run: 1SATURN_080623A				06/23/08 11:28		
Vinyl chloride	ND	ug/L	1.0						
m+p-Xylenes	ND	ug/L	1.0						
o-Xylene	ND	ug/L	1.0						
Xylenes, Total	ND	ug/L	1.0						
Surr: 1,2-Dichloroethane-d4			1.0	91	70	130			
Surr: Dibromofluoromethane			1.0	94	70	130			
Surr: p-Bromofluorobenzene			1.0	86	70	130			
Surr: Toluene-d8			1.0	94	70	130			
Sample ID: LCS062408A	Laboratory Control Sample		Run: 1SATURN_080623A				06/24/08 10:09		
Acetone	52.4	ug/L	20	105	70	130			
Acrylonitrile	41.6	ug/L	20	83	70	130			
Benzene	5.28	ug/L	1.0	106	70	130			
Bromochloromethane	4.56	ug/L	1.0	91	70	130			
Bromodichloromethane	4.88	ug/L	1.0	98	70	130			
Bromoform	4.40	ug/L	1.0	88	70	130			
Bromomethane	4.84	ug/L	1.0	97	70	130			
Carbon disulfide	5.56	ug/L	1.0	111	70	130			
Carbon tetrachloride	4.96	ug/L	1.0	99	70	130			
Chlorobenzene	5.04	ug/L	1.0	101	70	130			
Chlorodibromomethane	4.48	ug/L	1.0	90	70	130			
Chloroethane	5.48	ug/L	1.0	110	70	130			
Chloroform	4.48	ug/L	1.0	90	70	130			
Chloromethane	4.64	ug/L	1.0	93	70	130			
1,2-Dibromo-3-chloropropane	4.24	ug/L	1.0	85	70	130			
1,2-Dibromoethane	4.80	ug/L	1.0	96	70	130			
Dibromomethane	4.32	ug/L	1.0	86	70	130			
1,2-Dichlorobenzene	4.56	ug/L	1.0	91	70	130			
1,4-Dichlorobenzene	4.56	ug/L	1.0	91	70	130			
trans-1,4-Dichloro-2-butene	4.24	ug/L	1.0	85	70	130			
Dichlorodifluoromethane	4.40	ug/L	1.0	88	70	130			
1,1-Dichloroethane	4.76	ug/L	1.0	95	70	130			
1,2-Dichloroethane	4.36	ug/L	1.0	87	70	130			
1,1-Dichloroethene	4.72	ug/L	1.0	94	70	130			
cis-1,2-Dichloroethene	4.56	ug/L	1.0	91	70	130			
trans-1,2-Dichloroethene	4.96	ug/L	1.0	99	70	130			
1,2-Dichloropropane	5.44	ug/L	1.0	109	70	130			
cis-1,3-Dichloropropene	5.12	ug/L	1.0	102	70	130			
trans-1,3-Dichloropropene	5.84	ug/L	1.0	117	70	130			
Ethylbenzene	5.28	ug/L	1.0	106	70	130			
2-Hexanone	53.6	ug/L	20	107	70	130			
Iodomethane	4.68	ug/L	1.0	94	70	130			
Methyl ethyl ketone	46.4	ug/L	20	93	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46118		
Sample ID: LCS062408A	Laboratory Control Sample			Run: 1SATURN_080623A			06/24/08 10:09		
Methyl isobutyl ketone	51.6	ug/L	20	103	70	130			
Methylene chloride	3.94	ug/L	1.0	79	70	130			
Styrene	5.08	ug/L	1.0	102	70	130			
1,1,1,2-Tetrachloroethane	5.12	ug/L	1.0	102	70	130			
1,1,2,2-Tetrachloroethane	4.20	ug/L	1.0	84	70	130			
Tetrachloroethene	5.28	ug/L	1.0	106	70	130			
Toluene	5.32	ug/L	1.0	106	70	130			
1,1,1-Trichloroethane	5.08	ug/L	1.0	102	70	130			
1,1,2-Trichloroethane	5.12	ug/L	1.0	102	70	130			
Trichloroethene	5.40	ug/L	1.0	108	70	130			
Trichlorofluoromethane	5.08	ug/L	1.0	102	70	130			
1,2,3-Trichloropropane	4.32	ug/L	1.0	86	70	130			
Vinyl acetate	4.04	ug/L	1.0	81	70	130			
Vinyl chloride	4.40	ug/L	1.0	88	70	130			
m+p-Xylenes	9.52	ug/L	1.0	95	70	130			
o-Xylene	5.20	ug/L	1.0	104	70	130			
Xylenes, Total	14.7	ug/L	1.0	98	70	130			
Surr: 1,2-Dichloroethane-d4			1.0	84	70	130			
Surr: Dibromofluoromethane			1.0	98	70	130			
Surr: p-Bromofluorobenzene			1.0	86	70	130			
Surr: Toluene-d8			1.0	98	70	130			
Sample ID: MBLK062408A	Method Blank			Run: 1SATURN_080623A			06/24/08 11:20		
Acetone	ND	ug/L	20						
Acrylonitrile	ND	ug/L	20						
Benzene	ND	ug/L	1.0						
Bromochloromethane	ND	ug/L	1.0						
Bromodichloromethane	ND	ug/L	1.0						
Bromoform	ND	ug/L	1.0						
Bromomethane	ND	ug/L	1.0						
Carbon disulfide	ND	ug/L	1.0						
Carbon tetrachloride	ND	ug/L	1.0						
Chlorobenzene	ND	ug/L	1.0						
Chlorodibromomethane	ND	ug/L	1.0						
Chloroethane	ND	ug/L	1.0						
Chloroform	ND	ug/L	1.0						
Chloromethane	ND	ug/L	1.0						
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0						
1,2-Dibromoethane	ND	ug/L	1.0						
Dibromomethane	ND	ug/L	1.0						
1,2-Dichlorobenzene	ND	ug/L	1.0						
1,4-Dichlorobenzene	ND	ug/L	1.0						
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



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QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46118		
Sample ID: MBLK062408A	Method Blank		Run: 1SATURN_080623A				06/24/08 11:20		
Dichlorodifluoromethane	ND	ug/L	1.0						
1,1-Dichloroethane	ND	ug/L	1.0						
1,2-Dichloroethane	ND	ug/L	1.0						
1,1-Dichloroethene	ND	ug/L	1.0						
cis-1,2-Dichloroethene	ND	ug/L	1.0						
trans-1,2-Dichloroethene	ND	ug/L	1.0						
1,2-Dichloropropane	ND	ug/L	1.0						
cis-1,3-Dichloropropene	ND	ug/L	1.0						
trans-1,3-Dichloropropene	ND	ug/L	1.0						
Ethylbenzene	ND	ug/L	1.0						
2-Hexanone	ND	ug/L	20						
Iodomethane	ND	ug/L	1.0						
Methyl ethyl ketone	ND	ug/L	20						
Methyl isobutyl ketone	ND	ug/L	20						
Methylene chloride	ND	ug/L	1.0						
Styrene	ND	ug/L	1.0						
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0						
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0						
Tetrachloroethene	ND	ug/L	1.0						
Toluene	ND	ug/L	1.0						
1,1,1-Trichloroethane	ND	ug/L	1.0						
1,1,2-Trichloroethane	ND	ug/L	1.0						
Trichloroethene	ND	ug/L	1.0						
Trichlorofluoromethane	ND	ug/L	1.0						
1,2,3-Trichloropropane	ND	ug/L	1.0						
Vinyl acetate	ND	ug/L	1.0						
Vinyl chloride	ND	ug/L	1.0						
m+p-Xylenes	ND	ug/L	1.0						
o-Xylene	ND	ug/L	1.0						
Xylenes, Total	ND	ug/L	1.0						
Surr: 1,2-Dichloroethane-d4			1.0	93	70	130			
Surr: Dibromofluoromethane			1.0	100	70	130			
Surr: p-Bromofluorobenzene			1.0	88	70	130			
Surr: Toluene-d8			1.0	100	70	130			
Sample ID: H08060389-010AMS	Sample Matrix Spike		Run: 1SATURN_080623A				06/24/08 16:31		
Acetone	86.4	ug/L	40	86	70	130			
Acrylonitrile	97.6	ug/L	40	98	70	130			
Benzene	11.2	ug/L	2.0	112	70	130			
Bromochloromethane	9.04	ug/L	2.0	90	70	130			
Bromodichloromethane	10.6	ug/L	2.0	106	70	130			
Bromoform	9.76	ug/L	2.0	98	70	130			
Bromomethane	8.32	ug/L	2.0	83	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



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QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B									Batch: R46118
Sample ID: H08060389-010AMS	Sample Matrix Spike		Run: 1SATURN_080623A					06/24/08 16:31	
Carbon disulfide	10.4	ug/L	2.0	104	70	130			
Carbon tetrachloride	10.1	ug/L	2.0	101	70	130			
Chlorobenzene	10.3	ug/L	2.0	103	70	130			
Chlorodibromomethane	9.28	ug/L	2.0	93	70	130			
Chloroethane	8.32	ug/L	2.0	83	70	130			
Chloroform	9.76	ug/L	2.0	89	70	130			
Chloromethane	6.34	ug/L	2.0	63	70	130			S
1,2-Dibromo-3-chloropropane	8.56	ug/L	2.0	86	70	130			
1,2-Dibromoethane	9.76	ug/L	2.0	98	70	130			
Dibromomethane	11.1	ug/L	2.0	111	70	130			
1,2-Dichlorobenzene	10.5	ug/L	2.0	105	70	130			
1,4-Dichlorobenzene	9.36	ug/L	2.0	94	70	130			
trans-1,4-Dichloro-2-butene	7.63	ug/L	2.0	76	70	130			
Dichlorodifluoromethane	7.76	ug/L	2.0	78	70	130			
1,1-Dichloroethane	9.52	ug/L	2.0	95	70	130			
1,2-Dichloroethane	9.92	ug/L	2.0	99	70	130			
1,1-Dichloroethene	9.76	ug/L	2.0	98	70	130			
cis-1,2-Dichloroethene	9.84	ug/L	2.0	98	70	130			
trans-1,2-Dichloroethene	10.2	ug/L	2.0	102	70	130			
1,2-Dichloropropane	12.5	ug/L	2.0	125	70	130			
cis-1,3-Dichloropropene	11.4	ug/L	2.0	114	70	130			
trans-1,3-Dichloropropene	12.3	ug/L	2.0	123	70	130			
Ethylbenzene	10.7	ug/L	2.0	107	70	130			
2-Hexanone	124	ug/L	40	124	70	130			
Iodomethane	9.84	ug/L	2.0	98	70	130			
Methyl ethyl ketone	93.6	ug/L	40	94	70	130			
Methyl isobutyl ketone	121	ug/L	40	121	70	130			
Methylene chloride	8.32	ug/L	2.0	83	70	130			
Styrene	11.9	ug/L	2.0	119	70	130			
1,1,1,2-Tetrachloroethane	11.0	ug/L	2.0	110	70	130			
1,1,2,2-Tetrachloroethane	8.96	ug/L	2.0	90	70	130			
Tetrachloroethene	12.0	ug/L	2.0	116	70	130			
Toluene	11.5	ug/L	2.0	115	70	130			
1,1,1-Trichloroethane	10.1	ug/L	2.0	101	70	130			
1,1,2-Trichloroethane	11.3	ug/L	2.0	113	70	130			
Trichloroethene	11.5	ug/L	2.0	115	70	130			
Trichlorofluoromethane	9.12	ug/L	2.0	91	70	130			
1,2,3-Trichloropropane	8.56	ug/L	2.0	86	70	130			
Vinyl acetate	8.16	ug/L	2.0	82	70	130			
Vinyl chloride	7.59	ug/L	2.0	76	70	130			
m+p-Xylenes	21.1	ug/L	2.0	106	70	130			
o-Xylene	10.6	ug/L	2.0	106	70	130			
Xylenes, Total	31.8	ug/L	2.0	106	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B									Batch: R46118
Sample ID: H08060389-010AMS	Sample Matrix Spike		Run: 1SATURN_080623A					06/24/08 16:31	
Surr: 1,2-Dichloroethane-d4			2.0	90	70	130			
Surr: Dibromofluoromethane			2.0	92	70	130			
Surr: p-Bromofluorobenzene			2.0	84	70	130			
Surr: Toluene-d8			2.0	107	70	130			
Sample ID: H08060389-010AMSD	Sample Matrix Spike Duplicate		Run: 1SATURN_080623A					06/24/08 17:00	
Acetone	82.4	ug/L	40	82	70	130	4.7	20	
Acrylonitrile	86.4	ug/L	40	86	70	130	12	20	
Benzene	10.9	ug/L	2.0	109	70	130	2.9	20	
Bromochloromethane	8.96	ug/L	2.0	90	70	130	0.9	20	
Bromodichloromethane	10.6	ug/L	2.0	106	70	130	0.8	20	
Bromoform	8.48	ug/L	2.0	85	70	130	14	20	
Bromomethane	8.56	ug/L	2.0	86	70	130	2.8	20	
Carbon disulfide	10.9	ug/L	2.0	109	70	130	4.5	20	
Carbon tetrachloride	10.1	ug/L	2.0	101	70	130	0.0	20	
Chlorobenzene	10.8	ug/L	2.0	108	70	130	4.5	20	
Chlorodibromomethane	8.88	ug/L	2.0	89	70	130	4.4	20	
Chloroethane	8.64	ug/L	2.0	86	70	130	3.8	20	
Chloroform	9.76	ug/L	2.0	89	70	130	0.0	20	
Chloromethane	6.54	ug/L	2.0	65	70	130	3.0	20	S
1,2-Dibromo-3-chloropropane	8.88	ug/L	2.0	89	70	130	3.7	20	
1,2-Dibromoethane	10.0	ug/L	2.0	100	70	130	2.4	20	
Dibromomethane	11.0	ug/L	2.0	110	70	130	1.4	20	
1,2-Dichlorobenzene	10.6	ug/L	2.0	106	70	130	0.8	20	
1,4-Dichlorobenzene	8.96	ug/L	2.0	90	70	130	4.4	20	
trans-1,4-Dichloro-2-butene	7.85	ug/L	2.0	78	70	130	2.8	20	
Dichlorodifluoromethane	8.40	ug/L	2.0	84	70	130	7.9	20	
1,1-Dichloroethane	9.44	ug/L	2.0	94	70	130	0.8	20	
1,2-Dichloroethane	9.20	ug/L	2.0	92	70	130	7.5	20	
1,1-Dichloroethene	9.44	ug/L	2.0	94	70	130	3.3	20	
cis-1,2-Dichloroethene	10.0	ug/L	2.0	100	70	130	1.6	20	
trans-1,2-Dichloroethene	10.4	ug/L	2.0	104	70	130	1.6	20	
1,2-Dichloropropane	12.2	ug/L	2.0	122	70	130	2.6	20	
cis-1,3-Dichloropropene	11.3	ug/L	2.0	113	70	130	0.7	20	
trans-1,3-Dichloropropene	12.2	ug/L	2.0	122	70	130	1.3	20	
Ethylbenzene	10.9	ug/L	2.0	109	70	130	1.5	20	
2-Hexanone	126	ug/L	40	126	70	130	1.9	20	
Iodomethane	9.68	ug/L	2.0	97	70	130	1.6	20	
Methyl ethyl ketone	85.6	ug/L	40	86	70	130	8.9	20	
Methyl isobutyl ketone	112	ug/L	40	112	70	130	7.6	20	
Methylene chloride	8.40	ug/L	2.0	84	70	130	1.0	20	
Styrene	11.7	ug/L	2.0	117	70	130	2.0	20	
1,1,1,2-Tetrachloroethane	11.1	ug/L	2.0	111	70	130	0.7	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



ENERGY LABORATORIES, INC. * 3161 E Lyndale (59604) * PO Box 5688 * Helena, MT 59601
Toll Free 877.472.0711 * 406.442.0711 * FAX 406.442.0712 * helena@energylab.com

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

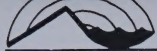
Report Date: 06/28/08
Work Order: H08060389

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46118		
Sample ID: H08060389-010AMSD	Sample Matrix Spike Duplicate			Run: 1SATURN_080623A			06/24/08 17:00		
1,1,2,2-Tetrachloroethane	8.24	ug/L	2.0	82	70	130	8.4	20	
Tetrachloroethene	12.0	ug/L	2.0	116	70	130	0.0	20	
Toluene	11.3	ug/L	2.0	113	70	130	2.1	20	
1,1,1-Trichloroethane	10.0	ug/L	2.0	100	70	130	0.8	20	
1,1,2-Trichloroethane	11.8	ug/L	2.0	118	70	130	4.2	20	
Trichloroethene	11.2	ug/L	2.0	112	70	130	2.8	20	
Trichlorofluoromethane	9.28	ug/L	2.0	93	70	130	1.7	20	
1,2,3-Trichloropropane	8.32	ug/L	2.0	83	70	130	2.8	20	
Vinyl acetate	7.66	ug/L	2.0	77	70	130	6.4	20	
Vinyl chloride	8.40	ug/L	2.0	84	70	130	10	20	
m+p-Xylenes	21.3	ug/L	2.0	106	70	130	0.8	20	
o-Xylene	11.0	ug/L	2.0	110	70	130	3.7	20	
Xylenes, Total	32.3	ug/L	2.0	108	70	130	1.7	20	
Surr: 1,2-Dichloroethane-d4			2.0	90	70	130	0.0	20	
Surr: Dibromofluoromethane			2.0	90	70	130	0.0	20	
Surr: p-Bromofluorobenzene			2.0	85	70	130	0.0	20	
Surr: Toluene-d8			2.0	109	70	130	0.0	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



CHAIN OF CUSTODY RECORD

3020 Bozeman Avenue • Helena, Montana 59601 • (406) 443-4150

PROJ. NO. 1273		PROJECT NAME City of Helena			NO. OF CON- TAINERS	Commons UF/RAW Nutrients UF/H₂SO₄ Diss. Metal F/HNO₃ CN UF/NaOH Total Metals UF/HNO₃ Total Recoverable Metals UF/HNO₃ BTEX TPH uF/HCL 5260*												REMARKS	
SAMPLERS: (Signature) <i>Ritz</i>																			
DATE	TIME	COMP	GRAB	SAMPLE NUMBER															
6/17/08	0400		X	HL-0806-100	2												X		H08060389-001
	0415			101	2														002
	1230			105															003
	1250			106															004
6/18/08	0845			110															005
	0915			111															006
	1000			113															007
	1400			118															008
	1410			119															009
6/19/08	0945		X	123													X		010
6/18/08	1415			HL-0806-102	2												X		011
Relinquished (Signature) <i>Ritz</i>		Date/Time 6/19/08 1310		Received by: (Signature) <i>W. Schapp</i>		Lab Energy Lab		P.O. # HLN09540		Shipped via: Bus, Fed Ex, UPS Other <u>Hand Delivered</u> Air Bill #									
Relinquished (Signature)		Date/Time		Received by: (Signature)		Remarks * 0.001 mg/L Detection Limit													
Relinquished (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time		Enclosed: ☒ Parameter sheet w/detection limits ☐ QA/QC standard mixing instructions ☐ Cover letter ☐ Other											

ANALYTICAL SUMMARY REPORT

Energy Laboratories Inc

Workorder Receipt Checklist



H08060389

Hydrometrics Inc

Login completed by: Wanda Johnson

Date and Time Received: 6/19/2008 1:10 PM

 Reviewed by: WJS

 Received by: wjj

 Reviewed Date: 6/24/08

Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed w hen relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees w ith sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received w ithin holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	2.3°C On Ice
Water - VOA vials have zero headspace?	Yes ☒	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☒

Contact and Corrective Action Comments:

None



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ANALYTICAL SUMMARY REPORT

July 12, 2008

Hydrometrics Inc
3020 Bozeman Ave
Helena, MT 59601

Workorder No.: H08060394

Project Name: 1273 City of Helena

Energy Laboratories Inc received the following 15 samples from Hydrometrics Inc on 6/19/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H08060394-001	HL-0806-104	06/17/08 11:00	06/19/08	Aqueous	Metals by ICP/ICPMS, Dissolved Cyanide, Total Manual Distillation Total Cyanide Digestion Chemical Oxygen Demand Conductivity Anions by Ion Chromatography Nitrogen, Nitrate + Nitrite pH 8260-Volatile Organic Comp, 40 CFR Part 258 App I
H08060394-002	HL-0806-107	06/17/08 13:25	06/19/08	Aqueous	Same As Above
H08060394-003	HL-0806-108	06/17/08 14:00	06/19/08	Aqueous	Same As Above
H08060394-004	HL-0806-109	06/18/08 8:30	06/19/08	Aqueous	Same As Above
H08060394-005	HL-0806-112	06/18/08 9:45	06/19/08	Aqueous	Same As Above
H08060394-006	HL-0806-114	06/18/08 11:15	06/19/08	Aqueous	Same As Above
H08060394-007	HL-0806-115	06/18/08 11:30	06/19/08	Aqueous	Same As Above
H08060394-008	HL-0806-116	06/18/08 13:10	06/19/08	Aqueous	Same As Above
H08060394-009	HL-0806-117	06/18/08 15:15	06/19/08	Aqueous	Same As Above
H08060394-010	HL-0806-120	06/19/08 8:30	06/19/08	Aqueous	Same As Above
H08060394-011	HL-0806-121	06/19/08 9:00	06/19/08	Aqueous	Same As Above
H08060394-012	HL-0806-122	06/19/08 9:30	06/19/08	Aqueous	Same As Above
H08060394-013	HL-0806-103	06/19/08 12:00	06/19/08	Aqueous	Same As Above
H08060394-014	HL-0806-124	06/19/08 10:30	06/19/08	Aqueous	Same As Above
H08060394-015	TB06/05/08 JM 102207-3	06/17/08 11:00	06/19/08	Trip Blank	8260-Volatile Organic Comp, 40 CFR Part 258 App I

BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945
eli-r - Energy Laboratories, Inc. - Rapid City, SD, EPA# SD00012
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are

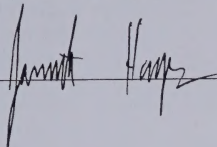
indicated within the Laboratory Analytical Report.

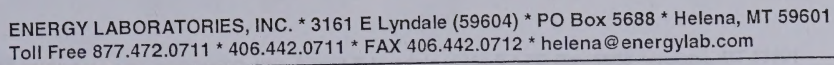
SAMPLE TEMPERATURE COMPLIANCE: 4°C ($\pm 2^\circ\text{C}$)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

ELI appreciates the opportunity to provide you with this analytical service. For additional information, including certifications, and analytical services visit our web page www.energylab.com.

Report Approved By: _____

A handwritten signature in black ink, appearing to be "J. Smith" followed by a flourish, is written over a horizontal line.





ENERGY LABORATORIES, INC. * 3161 E Lyndale (59604) * PO Box 5688 * Helena, MT 59601
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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-001
Client Sample ID: HL-0806-104

HL-94-2

Report Date: 07/12/08
Collection Date: 06/17/08 11:00
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
pH	7.6	s.u.		0.1		A4500-H B	06/20/08 10:35 / sld
Conductivity	955	umhos/cm		1		A2510 B	06/20/08 15:08 / kjw
INORGANICS							
Cyanide, Total	ND	mg/L		0.005		Kelada mod	06/24/08 14:02 / eli-b
Chloride	65	mg/L		1		E300.0	06/30/08 03:45 / abb
Sulfate	60	mg/L		1		E300.0	06/30/08 03:45 / abb
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	19	mg/L		1		E410.4	06/23/08 14:00 / stp
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	3.81	mg/L		0.05		E353.2	06/20/08 14:40 / stp
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	06/29/08 06:59 / eli-b
Arsenic	0.008	mg/L		0.005		E200.8	06/29/08 06:59 / eli-b
Barium	ND	mg/L		0.1		E200.7	06/27/08 03:29 / eli-b
Beryllium	ND	mg/L		0.001		E200.7	06/27/08 03:29 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	06/29/08 06:59 / eli-b
Chromium	ND	mg/L		0.01		E200.7	06/27/08 03:29 / eli-b
Cobalt	ND	mg/L		0.01		E200.7	06/27/08 03:29 / eli-b
Copper	ND	mg/L		0.01		E200.7	06/27/08 03:29 / eli-b
Iron	ND	mg/L		0.03		E200.7	06/27/08 03:29 / eli-b
Lead	ND	mg/L		0.01		E200.8	06/29/08 06:59 / eli-b
Mercury	ND	mg/L		0.001		E200.8	06/30/08 23:06 / eli-b
Nickel	ND	mg/L		0.01		E200.7	06/27/08 03:29 / eli-b
Selenium	ND	mg/L		0.005		E200.8	06/30/08 23:06 / eli-b
Silver	ND	mg/L		0.005		E200.7	06/27/08 03:29 / eli-b
Thallium	ND	mg/L		0.005		E200.8	06/29/08 06:59 / eli-b
Vanadium	ND	mg/L		0.1		E200.7	06/27/08 03:29 / eli-b
Zinc	ND	mg/L		0.01		E200.7	06/27/08 03:29 / eli-b
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 13:26 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 13:26 / jdh
Benzene	0.15	ug/L	J	1.0		SW8260B	06/23/08 13:26 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

J - Estimated value. The analyte was present but less than the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-001
Client Sample ID: HL-0806-104

Report Date: 07/12/08
Collection Date: 06/17/08 11:00
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Chloroform	0.90	ug/L	J	1.0		SW8260B	06/23/08 13:26 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
cis-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/23/08 13:26 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/23/08 13:26 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/23/08 13:26 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Toluene	0.16	ug/L	J	1.0		SW8260B	06/23/08 13:26 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Trichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Trichlorofluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh

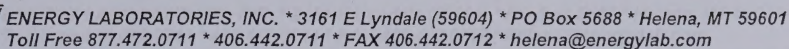
Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



Report Date: 07/12/08
Collection Date: 06/17/08 11:00
DateReceived: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Xylenes, Total	ND	ug/L		1.0		SW8260B	06/23/08 13:26 / jdh
Surr: 1,2-Dichloroethane-d4	85.0	%REC		70-130		SW8260B	06/23/08 13:26 / jdh
Surr: Dibromofluoromethane	90.0	%REC		70-130		SW8260B	06/23/08 13:26 / jdh
Surr: p-Bromofluorobenzene	89.0	%REC		70-130		SW8260B	06/23/08 13:26 / jdh
Surr: Toluene-d8	99.0	%REC		70-130		SW8260B	06/23/08 13:26 / jdh
SEMI-VOLATILE ORGANIC COMPOUNDS							
Chlorobenzene	ND	ug/L		0.1		SW8260B	06/23/08 13:26 / jdh
HEAVY METALS							
As	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
PAHs							
Acenaphthene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Acenaphthylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Anthracene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[a]anthracene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[a]pyrene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[b]fluoranthene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[k]fluoranthene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[e]pyrene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[g]herylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[h]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[i]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[j]fluoranthene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[k]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[l]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[m]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[n]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[o]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[p]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[q]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[r]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[s]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[t]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[u]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[v]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[w]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[x]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[y]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[z]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[aa]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[ab]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[ac]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[ad]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[ae]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[af]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[ag]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[ah]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[ai]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[aj]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[ak]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[al]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[am]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh
Benzo[an]perylene	ND	ug/L		0.01		SW8260B	06/23/08 13:26 / jdh

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-013
Client Sample ID: HL-0806-103

HL-90-2

Report Date: 07/12/08
Collection Date: 06/19/08 12:00
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
pH	7.7	s.u.		0.1		A4500-H B	06/20/08 10:50 / sld
Conductivity	673	umhos/cm		1		A2510 B	06/20/08 15:22 / kjw
INORGANICS							
Cyanide, Total	ND	mg/L		0.005		Kelada mod	06/24/08 15:11 / eli-b
Chloride	33	mg/L		1		E300.0	06/30/08 08:56 / abb
Sulfate	51	mg/L		1		E300.0	06/30/08 08:56 / abb
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		1		E410.4	06/23/08 14:00 / stp
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	0.73	mg/L		0.05		E353.2	06/20/08 15:08 / stp
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	06/29/08 17:18 / eli-b
Arsenic	ND	mg/L		0.005		E200.8	06/29/08 17:18 / eli-b
Barium	ND	mg/L		0.1		E200.7	06/27/08 05:04 / eli-b
Beryllium	ND	mg/L		0.001		E200.8	07/01/08 04:08 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	06/29/08 17:18 / eli-b
Chromium	ND	mg/L		0.01		E200.7	06/27/08 05:04 / eli-b
Cobalt	ND	mg/L		0.01		E200.7	06/27/08 05:04 / eli-b
Copper	ND	mg/L		0.01		E200.7	06/27/08 05:04 / eli-b
Iron	ND	mg/L		0.03		E200.7	06/27/08 05:04 / eli-b
Lead	ND	mg/L		0.01		E200.8	06/29/08 17:18 / eli-b
Mercury	ND	mg/L		0.001		E200.8	06/29/08 17:18 / eli-b
Nickel	ND	mg/L		0.01		E200.7	06/27/08 05:04 / eli-b
Selenium	ND	mg/L		0.005		E200.8	07/01/08 04:08 / eli-b
Silver	ND	mg/L		0.005		E200.8	07/01/08 04:08 / eli-b
Thallium	ND	mg/L		0.005		E200.8	06/29/08 17:18 / eli-b
Vanadium	ND	mg/L		0.1		E200.7	06/27/08 05:04 / eli-b
Zinc	ND	mg/L		0.01		E200.7	06/27/08 05:04 / eli-b
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/25/08 16:15 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/25/08 16:15 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-013
Client Sample ID: HL-0806-103

Report Date: 07/12/08
Collection Date: 06/19/08 12:00
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Chloroform	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
1,1-Dichloroethane	0.20	ug/L	J	1.0		SW8260B	06/25/08 16:15 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
cis-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/25/08 16:15 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/25/08 16:15 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/25/08 16:15 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Trichloroethene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Trichlorofluoromethane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/25/08 16:15 / jdh

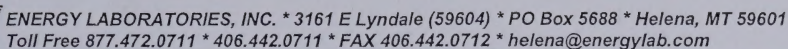
Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-013
Client Sample ID: HL-0806-103

Report Date: 07/12/08
Collection Date: 06/19/08 12:00
DateReceived: 06/19/08
Matrix: Aqueous

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



ENERGY LABORATORIES, INC. * 3161 E Lyndale (59604) * PO Box 5688 * Helena, MT 59601
Toll Free 877.472.0711 * 406.442.0711 * FAX 406.442.0712 * helena@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-002
Client Sample ID: HL-0806-107

HL-06-1

Report Date: 07/12/08
Collection Date: 06/17/08 13:25
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
pH	7.0	s.u.		0.1		A4500-H B	06/20/08 10:36 / sld
Conductivity	1040	umhos/cm		1		A2510 B	06/20/08 15:09 / kjw
INORGANICS							
Cyanide, Total	ND	mg/L		0.005		Kelada mod	06/24/08 14:11 / eli-b
Chloride	26	mg/L		1		E300.0	06/30/08 04:05 / abb
Sulfate	86	mg/L		1		E300.0	06/30/08 04:05 / abb
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		1		E410.4	06/23/08 14:00 / stp
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	0.81	mg/L		0.05		E353.2	06/20/08 14:42 / stp
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	06/30/08 23:14 / eli-b
Arsenic	ND	mg/L		0.005		E200.8	06/30/08 23:14 / eli-b
Barium	ND	mg/L		0.1		E200.7	06/27/08 03:33 / eli-b
Beryllium	ND	mg/L		0.001		E200.7	06/27/08 03:33 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	06/30/08 23:14 / eli-b
Chromium	ND	mg/L		0.01		E200.7	06/27/08 03:33 / eli-b
Cobalt	ND	mg/L		0.01		E200.7	06/27/08 03:33 / eli-b
Copper	ND	mg/L		0.01		E200.8	06/30/08 23:14 / eli-b
Iron	ND	mg/L		0.03		E200.7	06/27/08 03:33 / eli-b
Lead	ND	mg/L		0.01		E200.8	06/29/08 07:06 / eli-b
Mercury	ND	mg/L		0.001		E200.8	06/30/08 23:14 / eli-b
Nickel	ND	mg/L		0.01		E200.7	06/27/08 03:33 / eli-b
Selenium	ND	mg/L		0.005		E200.8	06/30/08 23:14 / eli-b
Silver	ND	mg/L		0.005		E200.8	06/30/08 23:14 / eli-b
Thallium	ND	mg/L		0.005		E200.8	06/29/08 07:06 / eli-b
Vanadium	ND	mg/L		0.1		E200.7	06/27/08 03:33 / eli-b
Zinc	ND	mg/L		0.01		E200.7	06/27/08 03:33 / eli-b
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 13:55 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 13:55 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/23/08 13:55 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 13:55 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/23/08 13:55 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 13:55 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 13:55 / jdh

Report: RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

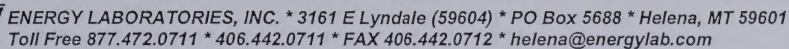
Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-002
Client Sample ID: HL-0806-107

Report Date: 07/12/08
Collection Date: 06/17/08 13:25
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Carbon disulfide	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Carbon tetrachloride	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Chlorobenzene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Chlorodibromomethane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Chloroethane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Chloroform	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Chloromethane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
1,2-Dibromoethane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Dibromomethane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Dichlorodifluoromethane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
1,1-Dichloroethane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
1,2-Dichloroethane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
1,1-Dichloroethene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
cis-1,2-Dichloroethene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
1,2-Dichloropropane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Ethylbenzene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
2-Hexanone	ND	ug/L		20	SW8260B		06/23/08 13:55 / jdh
Iodomethane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Methyl ethyl ketone	ND	ug/L		20	SW8260B		06/23/08 13:55 / jdh
Methyl isobutyl ketone	ND	ug/L		20	SW8260B		06/23/08 13:55 / jdh
Methylene chloride	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Styrene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Tetrachloroethene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Toluene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
1,1,1-Trichloroethane	4.2	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Trichloroethene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Trichlorofluoromethane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Vinyl acetate	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
Vinyl chloride	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
m+p-Xylenes	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh
o-Xylene	ND	ug/L		1.0	SW8260B		06/23/08 13:55 / jdh

Report: RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



Report Date: 07/12/08
Collection Date: 06/17/08 13:25
DateReceived: 06/19/08
Matrix: Aqueous

Report	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
Definitions:	QCL - Quality control limit.	ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-003
Client Sample ID: HL-0806-108

EP-1

Report Date: 07/12/08
Collection Date: 06/17/08 14:00
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
pH	6.9	s.u.		0.1		A4500-H B	06/20/08 10:38 / sld
Conductivity	1370	umhos/cm		1		A2510 B	06/20/08 15:10 / kjw
INORGANICS							
Cyanide, Total	ND	mg/L		0.005		Kelada mod	06/24/08 14:18 / eli-b
Chloride	92	mg/L		1		E300.0	06/30/08 04:24 / abb
Sulfate	130	mg/L		1		E300.0	06/30/08 04:24 / abb
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		1		E410.4	06/23/08 14:00 / stp
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	3.68	mg/L		0.05		E353.2	06/20/08 14:44 / stp
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	07/01/08 01:56 / eli-b
Arsenic	ND	mg/L		0.005		E200.8	07/01/08 01:56 / eli-b
Barium	ND	mg/L		0.1		E200.7	06/27/08 03:36 / eli-b
Beryllium	ND	mg/L		0.001		E200.7	06/27/08 03:36 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	07/01/08 01:56 / eli-b
Chromium	ND	mg/L		0.01		E200.7	06/27/08 03:36 / eli-b
Cobalt	ND	mg/L		0.01		E200.7	06/27/08 03:36 / eli-b
Copper	ND	mg/L		0.01		E200.8	07/01/08 01:56 / eli-b
Iron	0.03	mg/L		0.03		E200.7	06/27/08 03:36 / eli-b
Lead	ND	mg/L		0.01		E200.8	06/29/08 07:14 / eli-b
Mercury	ND	mg/L		0.001		E200.8	07/01/08 01:56 / eli-b
Nickel	0.02	mg/L		0.01		E200.7	06/27/08 03:36 / eli-b
Selenium	ND	mg/L		0.005		E200.8	07/01/08 01:56 / eli-b
Silver	ND	mg/L		0.005		E200.8	07/01/08 01:56 / eli-b
Thallium	ND	mg/L		0.005		E200.8	06/29/08 07:14 / eli-b
Vanadium	ND	mg/L		0.1		E200.7	06/27/08 03:36 / eli-b
Zinc	ND	mg/L		0.01		E200.7	06/27/08 03:36 / eli-b
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 14:24 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 14:24 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-003
Client Sample ID: HL-0806-108

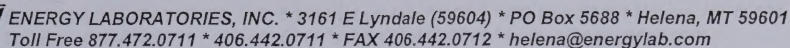
Report Date: 07/12/08
Collection Date: 06/17/08 14:00
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Chloroform	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Dichlorodifluoromethane	0.40	ug/L	J	1.0		SW8260B	06/23/08 14:24 / jdh
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
cis-1,2-Dichloroethene	0.72	ug/L	J	1.0		SW8260B	06/23/08 14:24 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
1,2-Dichloropropane	0.14	ug/L	J	1.0		SW8260B	06/23/08 14:24 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/23/08 14:24 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/23/08 14:24 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/23/08 14:24 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Tetrachloroethene	1.5	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Trichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Trichlorofluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/23/08 14:24 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



Report Date: 07/12/08
Collection Date: 06/17/08 14:00
DateReceived: 06/19/08
Matrix: Aqueous

- The sample was received in the laboratory at a pH >2. The pH was 7.0.

Report

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-004
Client Sample ID: HL-0806-109

HL-94-3

Report Date: 07/12/08
Collection Date: 06/18/08 08:30
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
pH	7.6	s.u.		0.1		A4500-H B	06/20/08 10:40 / sls
Conductivity	890	umhos/cm		1		A2510 B	06/20/08 15:12 / kjw
INORGANICS							
Cyanide, Total	0.010	mg/L		0.005		Kelada mod	06/26/08 17:28 / eli-b
Chloride	79	mg/L		1		E300.0	06/30/08 05:23 / abb
Sulfate	160	mg/L		1		E300.0	06/30/08 05:23 / abb
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		1		E410.4	06/23/08 14:00 / stp
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	11.1	mg/L	D	0.1		E353.2	06/20/08 14:50 / stp
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	07/01/08 02:04 / eli-b
Arsenic	ND	mg/L		0.005		E200.8	07/01/08 02:04 / eli-b
Barium	ND	mg/L		0.1		E200.7	06/27/08 03:40 / eli-b
Beryllium	ND	mg/L		0.001		E200.7	06/27/08 03:40 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	07/01/08 02:04 / eli-b
Chromium	ND	mg/L		0.01		E200.7	06/27/08 03:40 / eli-b
Cobalt	ND	mg/L		0.01		E200.7	06/27/08 03:40 / eli-b
Copper	ND	mg/L		0.01		E200.7	06/27/08 03:40 / eli-b
Iron	0.07	mg/L		0.03		E200.7	06/27/08 03:40 / eli-b
Lead	ND	mg/L		0.01		E200.8	07/01/08 02:04 / eli-b
Mercury	ND	mg/L		0.001		E200.8	07/01/08 02:04 / eli-b
Nickel	ND	mg/L		0.01		E200.7	06/27/08 03:40 / eli-b
Selenium	ND	mg/L		0.005		E200.8	07/01/08 02:04 / eli-b
Silver	ND	mg/L		0.005		E200.7	06/27/08 03:40 / eli-b
Thallium	ND	mg/L		0.005		E200.8	07/01/08 02:04 / eli-b
Vanadium	ND	mg/L		0.1		E200.7	06/27/08 03:40 / eli-b
Zinc	ND	mg/L		0.01		E200.7	06/27/08 03:40 / eli-b
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 14:54 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 14:54 / jdh
Benzene	0.15	ug/L	J	1.0		SW8260B	06/23/08 14:54 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Bromodichloromethane	0.65	ug/L	J	1.0		SW8260B	06/23/08 14:54 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

J - Estimated value. The analyte was present but less than reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-004
Client Sample ID: HL-0806-109

Report Date: 07/12/08
Collection Date: 06/18/08 08:30
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Chloroform	13	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
cis-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/23/08 14:54 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/23/08 14:54 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/23/08 14:54 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Toluene	0.44	ug/L	J	1.0		SW8260B	06/23/08 14:54 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Trichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Trichlorofluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh
m+p-Xylenes	0.29	ug/L	J	1.0		SW8260B	06/23/08 14:54 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/23/08 14:54 / jdh

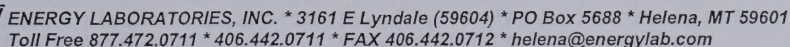
Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

J - Estimated value. The analyte was present but less than the reporting limit.



Report Date: 07/12/08
Collection Date: 06/18/08 08:30
DateReceived: 06/19/08
Matrix: Aqueous

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-005
Client Sample ID: HL-0806-112

MPC-1

Report Date: 07/12/08
Collection Date: 06/18/08 09:45
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
pH	7.4	s.u.		0.1		A4500-H B	06/20/08 10:41 / sld
Conductivity	987	umhos/cm		1		A2510 B	06/20/08 15:13 / kjw
INORGANICS							
Cyanide, Total	0.036	mg/L		0.005		Kelada mod	06/26/08 17:30 / eli-b
Chloride	61	mg/L		1		E300.0	06/30/08 05:42 / abb
Sulfate	190	mg/L		1		E300.0	06/30/08 05:42 / abb
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		1		E410.4	06/23/08 14:00 / stp
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	11.8	mg/L	D	0.1		E353.2	06/20/08 14:52 / stp
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	07/01/08 02:12 / eli-b
Arsenic	ND	mg/L		0.005		E200.8	07/01/08 02:12 / eli-b
Barium	ND	mg/L		0.1		E200.7	06/27/08 03:52 / eli-b
Beryllium	ND	mg/L		0.001		E200.7	06/27/08 03:52 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	07/01/08 02:12 / eli-b
Chromium	ND	mg/L		0.01		E200.7	06/27/08 03:52 / eli-b
Cobalt	ND	mg/L		0.01		E200.7	06/27/08 03:52 / eli-b
Copper	ND	mg/L		0.01		E200.7	06/27/08 03:52 / eli-b
Iron	ND	mg/L		0.03		E200.7	06/27/08 03:52 / eli-b
Lead	ND	mg/L		0.01		E200.8	07/01/08 02:12 / eli-b
Mercury	ND	mg/L		0.001		E200.8	07/01/08 02:12 / eli-b
Nickel	ND	mg/L		0.01		E200.7	06/27/08 03:52 / eli-b
Selenium	ND	mg/L		0.005		E200.8	07/01/08 02:12 / eli-b
Silver	ND	mg/L		0.005		E200.7	06/27/08 03:52 / eli-b
Thallium	ND	mg/L		0.005		E200.8	07/01/08 02:12 / eli-b
Vanadium	ND	mg/L		0.1		E200.7	06/27/08 03:52 / eli-b
Zinc	ND	mg/L		0.01		E200.7	06/27/08 03:52 / eli-b
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 15:23 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 15:23 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-005
Client Sample ID: HL-0806-112

Report Date: 07/12/08
Collection Date: 06/18/08 09:45
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Chloroform	1.8	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
1,1-Dichloroethane	2.0	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
cis-1,2-Dichloroethene	1.2	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/23/08 15:23 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/23/08 15:23 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/23/08 15:23 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Tetrachloroethene	6.2	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Toluene	0.23	ug/L	J	1.0		SW8260B	06/23/08 15:23 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Trichloroethene	1.6	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Trichlorofluoromethane	0.41	ug/L	J	1.0		SW8260B	06/23/08 15:23 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/23/08 15:23 / jdh

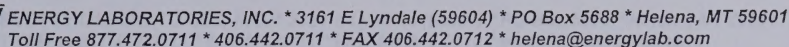
Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-005
Client Sample ID: HL-0806-112

Report Date: 07/12/08
Collection Date: 06/18/08 09:45
DateReceived: 06/19/08
Matrix: Aqueous

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-006
Client Sample ID: HL-0806-114

Report Date: 07/12/08
Collection Date: 06/18/08 11:15
Date Received: 06/19/08
Matrix: Aqueous

HL-90-3

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
pH	7.4	s.u.		0.1		A4500-H B	06/20/08 10:42 / slt
Conductivity	1090	umhos/cm		1		A2510 B	06/20/08 15:13 / kjw
INORGANICS							
Cyanide, Total	ND	mg/L		0.005		Kelada mod	06/24/08 14:24 / eli-b
Chloride	55	mg/L		1		E300.0	06/30/08 06:01 / abb
Sulfate	170	mg/L		1		E300.0	06/30/08 06:01 / abb
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		1		E410.4	06/23/08 14:00 / stp
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	9.8	mg/L	D	0.1		E353.2	06/20/08 14:54 / stp
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	06/29/08 08:31 / eli-b
Arsenic	ND	mg/L		0.005		E200.8	06/29/08 08:31 / eli-b
Barium	ND	mg/L		0.1		E200.7	06/27/08 03:55 / eli-b
Beryllium	ND	mg/L		0.001		E200.7	06/27/08 03:55 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	06/29/08 08:31 / eli-b
Chromium	ND	mg/L		0.01		E200.7	06/27/08 03:55 / eli-b
Cobalt	ND	mg/L		0.01		E200.7	06/27/08 03:55 / eli-b
Copper	ND	mg/L		0.01		E200.8	06/29/08 08:31 / eli-b
Iron	ND	mg/L		0.03		E200.7	06/27/08 03:55 / eli-b
Lead	ND	mg/L		0.01		E200.8	06/29/08 08:31 / eli-b
Mercury	ND	mg/L		0.001		E200.8	07/01/08 02:19 / eli-b
Nickel	ND	mg/L		0.01		E200.7	06/27/08 03:55 / eli-b
Selenium	ND	mg/L		0.005		E200.8	06/29/08 08:31 / eli-b
Silver	ND	mg/L		0.005		E200.8	06/29/08 08:31 / eli-b
Thallium	ND	mg/L		0.005		E200.8	06/29/08 08:31 / eli-b
Vanadium	ND	mg/L		0.1		E200.7	06/27/08 03:55 / eli-b
Zinc	ND	mg/L		0.01		E200.7	06/27/08 03:55 / eli-b
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 15:53 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 15:53 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Bromodichloromethane	0.56	ug/L	J	1.0		SW8260B	06/23/08 15:53 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
J - Estimated value. The analyte was present but less than reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-006
Client Sample ID: HL-0806-114

Report Date: 07/12/08
Collection Date: 06/18/08 11:15
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Chloroform	9.5	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
cis-1,2-Dichloroethene	0.22	ug/L	J	1.0		SW8260B	06/23/08 15:53 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/23/08 15:53 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/23/08 15:53 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/23/08 15:53 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Tetrachloroethene	0.28	ug/L	J	1.0		SW8260B	06/23/08 15:53 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Trichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Trichlorofluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/23/08 15:53 / jdh

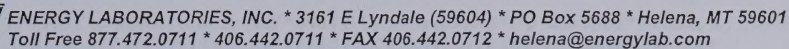
Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



Report Date: 07/12/08
Collection Date: 06/18/08 11:15
DateReceived: 06/19/08
Matrix: Aqueous

Report	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
Definitions:	QCL - Quality control limit.	ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-007
Client Sample ID: HL-0806-115

Report Date: 07/12/08
Collection Date: 06/18/08 11:30
Date Received: 06/19/08
Matrix: Aqueous

HL-80-3
Duplicate

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
pH	7.4	s.u.		0.1		A4500-H B	06/20/08 10:43 / sld
Conductivity	1100	umhos/cm		1		A2510 B	06/20/08 15:14 / kjw
INORGANICS							
Cyanide, Total	ND	mg/L		0.005		Kelada mod	06/24/08 14:25 / eli-b
Chloride	55	mg/L		1		E300.0	06/30/08 06:21 / abb
Sulfate	170	mg/L		1		E300.0	06/30/08 06:21 / abb
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		1		E410.4	06/23/08 14:00 / stp
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	9.6	mg/L	D	0.1		E353.2	06/20/08 14:56 / stp
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	06/29/08 08:39 / eli-b
Arsenic	ND	mg/L		0.005		E200.8	06/29/08 08:39 / eli-b
Barium	ND	mg/L		0.1		E200.7	06/27/08 03:59 / eli-b
Beryllium	ND	mg/L		0.001		E200.7	06/27/08 03:59 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	06/29/08 08:39 / eli-b
Chromium	ND	mg/L		0.01		E200.7	06/27/08 03:59 / eli-b
Cobalt	ND	mg/L		0.01		E200.7	06/27/08 03:59 / eli-b
Copper	ND	mg/L		0.01		E200.8	06/29/08 08:39 / eli-b
Iron	ND	mg/L		0.03		E200.7	06/27/08 03:59 / eli-b
Lead	ND	mg/L		0.01		E200.8	06/29/08 08:39 / eli-b
Mercury	ND	mg/L		0.001		E200.8	07/01/08 02:27 / eli-b
Nickel	ND	mg/L		0.01		E200.7	06/27/08 03:59 / eli-b
Selenium	ND	mg/L		0.005		E200.8	06/29/08 08:39 / eli-b
Silver	ND	mg/L		0.005		E200.8	06/29/08 08:39 / eli-b
Thallium	ND	mg/L		0.005		E200.8	06/29/08 08:39 / eli-b
Vanadium	ND	mg/L		0.1		E200.7	06/27/08 03:59 / eli-b
Zinc	ND	mg/L		0.01		E200.7	06/27/08 03:59 / eli-b
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 16:23 / jdH
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 16:23 / jdH
Benzene	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdH
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdH
Bromodichloromethane	0.51	ug/L	J	1.0		SW8260B	06/23/08 16:23 / jdH
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdH
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdH

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
J - Estimated value. The analyte was present but less than reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-007
Client Sample ID: HL-0806-115

Report Date: 07/12/08
Collection Date: 06/18/08 11:30
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Chloroform	9.8	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
cis-1,2-Dichloroethene	0.23	ug/L	J	1.0		SW8260B	06/23/08 16:23 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/23/08 16:23 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/23/08 16:23 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/23/08 16:23 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Tetrachloroethene	0.28	ug/L	J	1.0		SW8260B	06/23/08 16:23 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Trichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Trichlorofluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/23/08 16:23 / jdh

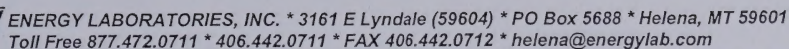
Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-007
Client Sample ID: HL-0806-115

Report Date: 07/12/08
Collection Date: 06/18/08 11:30
DateReceived: 06/19/08
Matrix: Aqueous

[illegible]

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-008
Client Sample ID: HL-0806-116

HL-94-1

Report Date: 07/12/08
Collection Date: 06/18/08 13:10
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
pH	7.5	s.u.		0.1		A4500-H B	06/20/08 10:44 / sid
Conductivity	902	umhos/cm		1		A2510 B	06/20/08 15:15 / kjw
INORGANICS							
Cyanide, Total	ND	mg/L		0.005		Kelada mod	06/24/08 15:52 / eli-b
Chloride	23	mg/L		1		E300.0	06/30/08 06:40 / abb
Sulfate	98	mg/L		1		E300.0	06/30/08 06:40 / abb
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		1		E410.4	06/23/08 14:00 / stp
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	3.75	mg/L		0.05		E353.2	06/20/08 14:58 / stp
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	06/29/08 08:47 / eli-b
Arsenic	ND	mg/L		0.005		E200.8	06/29/08 08:47 / eli-b
Barium	ND	mg/L		0.1		E200.7	06/27/08 04:03 / eli-b
Beryllium	ND	mg/L		0.001		E200.7	06/27/08 04:03 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	06/29/08 08:47 / eli-b
Chromium	ND	mg/L		0.01		E200.7	06/27/08 04:03 / eli-b
Cobalt	ND	mg/L		0.01		E200.7	06/27/08 04:03 / eli-b
Copper	ND	mg/L		0.01		E200.7	06/27/08 04:03 / eli-b
Iron	ND	mg/L		0.03		E200.7	06/27/08 04:03 / eli-b
Lead	ND	mg/L		0.01		E200.8	06/29/08 08:47 / eli-b
Mercury	ND	mg/L		0.001		E200.8	07/01/08 02:35 / eli-b
Nickel	ND	mg/L		0.01		E200.7	06/27/08 04:03 / eli-b
Selenium	ND	mg/L		0.005		E200.8	06/29/08 08:47 / eli-b
Silver	ND	mg/L		0.005		E200.7	06/27/08 04:03 / eli-b
Thallium	ND	mg/L		0.005		E200.8	06/29/08 08:47 / eli-b
Vanadium	ND	mg/L		0.1		E200.7	06/27/08 04:03 / eli-b
Zinc	ND	mg/L		0.01		E200.7	06/27/08 04:03 / eli-b
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 16:52 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 16:52 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Bromodichloromethane	0.64	ug/L	J	1.0		SW8260B	06/23/08 16:52 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

J - Estimated value. The analyte was present but less than the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-008
Client Sample ID: HL-0806-116

Report Date: 07/12/08
Collection Date: 06/18/08 13:10
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Chloroform	6.3	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
cis-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/23/08 16:52 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/23/08 16:52 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/23/08 16:52 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Trichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Trichlorofluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-008
Client Sample ID: HL-0806-116

Report Date: 07/12/08
Collection Date: 06/18/08 13:10
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Xylenes, Total	ND	ug/L		1.0		SW8260B	06/23/08 16:52 / jdh
Surr: 1,2-Dichloroethane-d4	94.0	%REC		70-130		SW8260B	06/23/08 16:52 / jdh
Surr: Dibromofluoromethane	98.0	%REC		70-130		SW8260B	06/23/08 16:52 / jdh
Surr: p-Bromofluorobenzene	88.0	%REC		70-130		SW8260B	06/23/08 16:52 / jdh
Surr: Toluene-d8	99.0	%REC		70-130		SW8260B	06/23/08 16:52 / jdh

- The sample was received in the laboratory at a pH >2. The pH was 7.0.

Report: RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-009
Client Sample ID: HL-0806-117

MPC-S

Report Date: 07/12/08
Collection Date: 06/18/08 15:15
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
pH	7.5	s.u.		0.1		A4500-H B	06/20/08 10:45 / slt
Conductivity	3720	umhos/cm		1		A2510 B	06/20/08 15:16 / kjw
INORGANICS							
Cyanide, Total	10.6	mg/L	D	0.3		Kelada mod	06/26/08 17:52 / eli-b
Chloride	31	mg/L		1		E300.0	06/30/08 07:00 / abb
Sulfate	1000	mg/L		1		E300.0	06/30/08 07:00 / abb
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	54	mg/L		1		E410.4	06/23/08 14:00 / stp
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	18.8	mg/L	D	0.2		E353.2	06/20/08 15:00 / stp
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	06/29/08 08:54 / eli-b
Arsenic	0.037	mg/L		0.005		E200.8	06/29/08 08:54 / eli-b
Barium	ND	mg/L		0.1		E200.7	06/27/08 04:07 / eli-b
Beryllium	ND	mg/L		0.001		E200.8	06/29/08 08:54 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	06/29/08 08:54 / eli-b
Chromium	ND	mg/L		0.01		E200.8	06/29/08 08:54 / eli-b
Cobalt	0.02	mg/L		0.01		E200.8	06/29/08 08:54 / eli-b
Copper	0.02	mg/L		0.01		E200.8	06/29/08 08:54 / eli-b
Iron	2.62	mg/L		0.03		E200.7	06/27/08 04:07 / eli-b
Lead	ND	mg/L		0.01		E200.8	06/29/08 08:54 / eli-b
Mercury	ND	mg/L		0.001		E200.8	07/01/08 02:43 / eli-b
Nickel	0.05	mg/L		0.01		E200.8	06/29/08 08:54 / eli-b
Selenium	ND	mg/L		0.005		E200.8	06/29/08 08:54 / eli-b
Silver	ND	mg/L		0.005		E200.8	06/29/08 08:54 / eli-b
Thallium	ND	mg/L		0.005		E200.8	06/29/08 08:54 / eli-b
Vanadium	0.5	mg/L		0.1		E200.7	06/27/08 04:07 / eli-b
Zinc	ND	mg/L		0.01		E200.7	06/27/08 04:07 / eli-b
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 17:22 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 17:22 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-009
Client Sample ID: HL-0806-117

Report Date: 07/12/08
Collection Date: 06/18/08 15:15
Date Received: 06/19/08
Matrix: Aqueous

MPC-5

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Chloroform	0.31	ug/L	J	1.0		SW8260B	06/23/08 17:22 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Dichlorodifluoromethane	0.31	ug/L	J	1.0		SW8260B	06/23/08 17:22 / jdh
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
cis-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/23/08 17:22 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/23/08 17:22 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/23/08 17:22 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Tetrachloroethene	0.53	ug/L	J	1.0		SW8260B	06/23/08 17:22 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
1,1,1-Trichloroethane	0.17	ug/L	J	1.0		SW8260B	06/23/08 17:22 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Trichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Trichlorofluoromethane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/23/08 17:22 / jdh

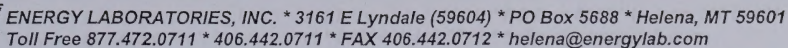
Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

J - Estimated value. The analyte was present but less than the reporting limit.



Report Date: 07/12/08
Collection Date: 06/18/08 15:15
DateReceived: 06/19/08
Matrix: Aqueous

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



ENERGY LABORATORIES, INC. * 3161 E Lyndale (59604) * PO Box 5688 * Helena, MT 59601
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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-010
Client Sample ID: HL-0806-120

HL-99-3

Report Date: 07/12/08
Collection Date: 06/19/08 08:30
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
pH	7.5	s.u.		0.1		A4500-H B	06/20/08 10:46 / sld
Conductivity	881	umhos/cm		1		A2510 B	06/20/08 15:19 / kjw
INORGANICS							
Cyanide, Total	0.038	mg/L		0.005		Kelada mod	06/26/08 17:34 / eli-b
Chloride	50	mg/L		1		E300.0	06/30/08 07:19 / abb
Sulfate	160	mg/L		1		E300.0	06/30/08 07:19 / abb
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		1		E410.4	06/23/08 14:00 / stp
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	8.9	mg/L	D	0.1		E353.2	06/20/08 15:02 / stp
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	06/29/08 09:02 / eli-b
Arsenic	ND	mg/L		0.005		E200.8	06/29/08 09:02 / eli-b
Barium	ND	mg/L		0.1		E200.7	06/27/08 04:18 / eli-b
Beryllium	ND	mg/L		0.001		E200.7	06/27/08 04:18 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	06/29/08 09:02 / eli-b
Chromium	ND	mg/L		0.01		E200.7	06/27/08 04:18 / eli-b
Cobalt	ND	mg/L		0.01		E200.7	06/27/08 04:18 / eli-b
Copper	ND	mg/L		0.01		E200.7	06/27/08 04:18 / eli-b
Iron	ND	mg/L		0.03		E200.7	06/27/08 04:18 / eli-b
Lead	ND	mg/L		0.01		E200.8	06/29/08 09:02 / eli-b
Mercury	ND	mg/L		0.001		E200.8	07/01/08 02:50 / eli-b
Nickel	ND	mg/L		0.01		E200.7	06/27/08 04:18 / eli-b
Selenium	ND	mg/L		0.005		E200.8	06/29/08 09:02 / eli-b
Silver	ND	mg/L		0.005		E200.7	06/27/08 04:18 / eli-b
Thallium	ND	mg/L		0.005		E200.8	06/29/08 09:02 / eli-b
Vanadium	ND	mg/L		0.1		E200.7	06/27/08 04:18 / eli-b
Zinc	ND	mg/L		0.01		E200.7	06/27/08 04:18 / eli-b
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 17:51 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 17:51 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



ENERGY LABORATORIES, INC. * 3161 E Lyndale (59604) * PO Box 5688 * Helena, MT 59601
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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-010
Client Sample ID: HL-0806-120

Report Date: 07/12/08
Collection Date: 06/19/08 08:30
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Chloroform	2.3	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Dichlorodifluoromethane	1.7	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
1,1-Dichloroethane	2.6	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
cis-1,2-Dichloroethene	0.59	ug/L	J	1.0		SW8260B	06/23/08 17:51 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/23/08 17:51 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/23/08 17:51 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/23/08 17:51 / jdh
Methylene chloride	0.92	ug/L	J	1.0		SW8260B	06/23/08 17:51 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Tetrachloroethene	6.0	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Trichloroethene	1.2	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Trichlorofluoromethane	0.55	ug/L	J	1.0		SW8260B	06/23/08 17:51 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/23/08 17:51 / jdh

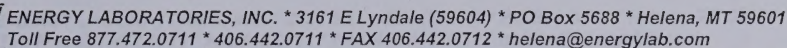
Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



Report Date: 07/12/08
Collection Date: 06/19/08 08:30
DateReceived: 06/19/08
Matrix: Aqueous

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-011
Client Sample ID: HL-0806-121

HL-99-2

Report Date: 07/12/08
Collection Date: 06/19/08 09:00
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
pH	7.5	s.u.		0.1		A4500-H B	06/20/08 10:47 / sls
Conductivity	807	umhos/cm		1		A2510 B	06/20/08 15:20 / kjw
INORGANICS							
Cyanide, Total	0.013	mg/L		0.005		Kelada mod	06/26/08 17:36 / eli-b
Chloride	43	mg/L		1		E300.0	06/30/08 08:17 / abb
Sulfate	120	mg/L		1		E300.0	06/30/08 08:17 / abb
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		1		E410.4	06/23/08 14:00 / stp
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	6.75	mg/L		0.05		E353.2	06/20/08 15:04 / stp
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	06/29/08 09:10 / eli-b
Arsenic	ND	mg/L		0.005		E200.8	06/29/08 09:10 / eli-b
Barium	ND	mg/L		0.1		E200.7	06/27/08 04:25 / eli-b
Beryllium	ND	mg/L		0.001		E200.7	06/27/08 04:25 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	06/29/08 09:10 / eli-b
Chromium	ND	mg/L		0.01		E200.7	06/27/08 04:25 / eli-b
Cobalt	ND	mg/L		0.01		E200.7	06/27/08 04:25 / eli-b
Copper	ND	mg/L		0.01		E200.7	06/27/08 04:25 / eli-b
Iron	ND	mg/L		0.03		E200.7	06/27/08 04:25 / eli-b
Lead	ND	mg/L		0.01		E200.8	06/29/08 09:10 / eli-b
Mercury	ND	mg/L		0.001		E200.8	07/01/08 02:58 / eli-b
Nickel	ND	mg/L		0.01		E200.7	06/27/08 04:25 / eli-b
Selenium	ND	mg/L		0.005		E200.8	06/29/08 09:10 / eli-b
Silver	ND	mg/L		0.005		E200.7	06/27/08 04:25 / eli-b
Thallium	ND	mg/L		0.005		E200.8	06/29/08 09:10 / eli-b
Vanadium	ND	mg/L		0.1		E200.7	06/27/08 04:25 / eli-b
Zinc	ND	mg/L		0.01		E200.7	06/27/08 04:25 / eli-b
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/23/08 18:21 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/23/08 18:21 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-011
Client Sample ID: HL-0806-121

Report Date: 07/12/08
Collection Date: 06/19/08 09:00
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Chloroform	1.6	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Dichlorodifluoromethane	0.99	ug/L	J	1.0		SW8260B	06/23/08 18:21 / jdh
1,1-Dichloroethane	1.2	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
cis-1,2-Dichloroethene	0.51	ug/L	J	1.0		SW8260B	06/23/08 18:21 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/23/08 18:21 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/23/08 18:21 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/23/08 18:21 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Tetrachloroethene	3.3	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Toluene	0.31	ug/L	J	1.0		SW8260B	06/23/08 18:21 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Trichloroethene	0.70	ug/L	J	1.0		SW8260B	06/23/08 18:21 / jdh
Trichlorofluoromethane	0.31	ug/L	J	1.0		SW8260B	06/23/08 18:21 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh

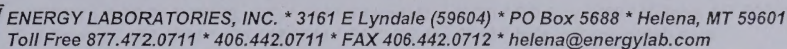
Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-011
Client Sample ID: HL-0806-121

Report Date: 07/12/08
Collection Date: 06/19/08 09:00
DateReceived: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Xylenes, Total	ND	ug/L		1.0		SW8260B	06/23/08 18:21 / jdh
Surr: 1,2-Dichloroethane-d4	97.0	%REC		70-130		SW8260B	06/23/08 18:21 / jdh
Surr: Dibromofluoromethane	94.0	%REC		70-130		SW8260B	06/23/08 18:21 / jdh
Surr: p-Bromofluorobenzene	90.0	%REC		70-130		SW8260B	06/23/08 18:21 / jdh
Surr: Toluene-d8	96.0	%REC		70-130		SW8260B	06/23/08 18:21 / jdh
SEMI-VOLATILE ORGANIC COMPOUNDS							
Chlorobenzene	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Bromobenzene	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
HEAVY METALS							
Asbestos	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Barium	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Bismuth	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Boron	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Calcium	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Chromium	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Copper	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Fluorine	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Iron	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Magnesium	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Manganese	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Molybdenum	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Nickel	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Phosphorus	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Potassium	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Selenium	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Silver	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Sulfur	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Vanadium	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Zinc	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
NON-VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Acrylonitrile	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Benzo(a)pyrene	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Benzo(a)anthracene	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Benzo(b)fluoranthene	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Benzo(k)fluoranthene	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Benzo(e)pyrene	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh
Benzo(g,h,i)perylene	ND	ug/L		0.1		SW8260B	06/23/08 18:21 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-012
Client Sample ID: HL-0806-122

HL-99-1

Report Date: 07/12/08
Collection Date: 06/19/08 09:30
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
pH	7.3	s.u.		0.1		A4500-H B	06/20/08 10:49 / sld
Conductivity	1110	umhos/cm		1		A2510 B	06/20/08 15:21 / kjw
INORGANICS							
Cyanide, Total	ND	mg/L		0.005		Kelada mod	06/24/08 15:04 / eli-b
Chloride	71	mg/L		1		E300.0	06/30/08 08:37 / abb
Sulfate	170	mg/L		1		E300.0	06/30/08 08:37 / abb
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		1		E410.4	06/23/08 14:00 / stp
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	9.3	mg/L	D	0.1		E353.2	06/20/08 15:06 / stp
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	06/29/08 09:18 / eli-b
Arsenic	ND	mg/L		0.005		E200.8	06/29/08 09:18 / eli-b
Barium	ND	mg/L		0.1		E200.7	06/27/08 05:00 / eli-b
Beryllium	ND	mg/L		0.001		E200.8	06/29/08 09:18 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	06/29/08 09:18 / eli-b
Chromium	ND	mg/L		0.01		E200.7	06/27/08 05:00 / eli-b
Cobalt	ND	mg/L		0.01		E200.7	06/27/08 05:00 / eli-b
Copper	ND	mg/L		0.01		E200.8	06/29/08 09:18 / eli-b
Iron	ND	mg/L		0.03		E200.7	06/27/08 05:00 / eli-b
Lead	ND	mg/L		0.01		E200.8	06/29/08 09:18 / eli-b
Mercury	ND	mg/L		0.001		E200.8	07/01/08 04:00 / eli-b
Nickel	ND	mg/L		0.01		E200.7	06/27/08 05:00 / eli-b
Selenium	ND	mg/L		0.005		E200.8	06/29/08 09:18 / eli-b
Silver	ND	mg/L		0.005		E200.8	06/29/08 09:18 / eli-b
Thallium	ND	mg/L		0.005		E200.8	06/29/08 09:18 / eli-b
Vanadium	ND	mg/L		0.1		E200.7	06/27/08 05:00 / eli-b
Zinc	ND	mg/L		0.01		E200.8	06/29/08 09:18 / eli-b
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/25/08 15:45 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/25/08 15:45 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/25/08 15:45 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/25/08 15:45 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/25/08 15:45 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/25/08 15:45 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/25/08 15:45 / jdh

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-012
Client Sample ID: HL-0806-122

Report Date: 07/12/08
Collection Date: 06/19/08 09:30
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Carbon disulfide	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Carbon tetrachloride	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Chlorobenzene	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Chlorodibromomethane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Chloroethane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Chloroform	3.3	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Chloromethane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
1,2-Dibromoethane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Dibromomethane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
1,2-Dichlorobenzene	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
1,4-Dichlorobenzene	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Dichlorodifluoromethane	0.76	ug/L	J	1.0	SW8260B	06/25/08 15:45 / jdh	
1,1-Dichloroethane	0.56	ug/L	J	1.0	SW8260B	06/25/08 15:45 / jdh	
1,2-Dichloroethane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
1,1-Dichloroethene	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
cis-1,2-Dichloroethene	2.0	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
trans-1,2-Dichloroethene	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
1,2-Dichloropropane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
cis-1,3-Dichloropropene	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
trans-1,3-Dichloropropene	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Ethylbenzene	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
2-Hexanone	ND	ug/L		20	SW8260B	06/25/08 15:45 / jdh	
Iodomethane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Methyl ethyl ketone	ND	ug/L		20	SW8260B	06/25/08 15:45 / jdh	
Methyl isobutyl ketone	ND	ug/L		20	SW8260B	06/25/08 15:45 / jdh	
Methylene chloride	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Styrene	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Tetrachloroethene	3.9	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Toluene	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
1,1,1-Trichloroethane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
1,1,2-Trichloroethane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Trichloroethene	0.76	ug/L	J	1.0	SW8260B	06/25/08 15:45 / jdh	
Trichlorofluoromethane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
1,2,3-Trichloropropane	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Vinyl acetate	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
Vinyl chloride	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
m+p-Xylenes	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	
o-Xylene	ND	ug/L		1.0	SW8260B	06/25/08 15:45 / jdh	

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-012
Client Sample ID: HL-0806-122

Report Date: 07/12/08
Collection Date: 06/19/08 09:30
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Xylenes, Total	ND	ug/L		1.0		SW8260B	06/25/08 15:45 / jdh
Surr: 1,2-Dichloroethane-d4	99.0	%REC		70-130		SW8260B	06/25/08 15:45 / jdh
Surr: Dibromofluoromethane	101	%REC		70-130		SW8260B	06/25/08 15:45 / jdh
Surr: p-Bromofluorobenzene	78.0	%REC		70-130		SW8260B	06/25/08 15:45 / jdh
Surr: Toluene-d8	103	%REC		70-130		SW8260B	06/25/08 15:45 / jdh

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-014
Client Sample ID: HL-0806-124

Report Date: 07/12/08
Collection Date: 06/19/08 10:30
Date Received: 06/19/08
Matrix: Aqueous

Equip. Blank

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
pH	5.8	s.u.		0.1		A4500-H B	06/20/08 10:58 / sld
Conductivity	2	umhos/cm		1		A2510 B	06/20/08 15:30 / kjw
INORGANICS							
Cyanide, Total	ND	mg/L		0.005		Kelada mod	06/24/08 15:13 / eli-b
Chloride	ND	mg/L		1		E300.0	06/30/08 09:55 / abb
Sulfate	ND	mg/L		1		E300.0	06/30/08 09:55 / abb
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		1		E410.4	06/23/08 14:00 / stp
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.05		E353.2	06/20/08 15:14 / stp
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	06/29/08 17:26 / eli-b
Arsenic	ND	mg/L		0.005		E200.8	06/29/08 17:26 / eli-b
Barium	ND	mg/L		0.1		E200.7	06/27/08 05:08 / eli-b
Beryllium	ND	mg/L		0.001		E200.8	07/01/08 04:15 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	06/29/08 17:26 / eli-b
Chromium	ND	mg/L		0.01		E200.7	06/27/08 05:08 / eli-b
Cobalt	ND	mg/L		0.01		E200.7	06/27/08 05:08 / eli-b
Copper	ND	mg/L		0.01		E200.7	06/27/08 05:08 / eli-b
Iron	ND	mg/L		0.03		E200.7	06/27/08 05:08 / eli-b
Lead	ND	mg/L		0.01		E200.8	06/29/08 17:26 / eli-b
Mercury	ND	mg/L		0.001		E200.8	06/29/08 17:26 / eli-b
Nickel	ND	mg/L		0.01		E200.7	06/27/08 05:08 / eli-b
Selenium	ND	mg/L		0.005		E200.8	07/01/08 04:15 / eli-b
Silver	ND	mg/L		0.005		E200.8	07/01/08 04:15 / eli-b
Thallium	ND	mg/L		0.005		E200.8	06/29/08 17:26 / eli-b
Vanadium	ND	mg/L		0.1		E200.7	06/27/08 05:08 / eli-b
Zinc	ND	mg/L		0.01		E200.7	06/27/08 05:08 / eli-b
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/25/08 16:45 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/25/08 16:45 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Bromodichloromethane	5.0	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Bromoform	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-014
Client Sample ID: HL-0806-124

Report Date: 07/12/08
Collection Date: 06/19/08 10:30
Date Received: 06/19/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Chlorodibromomethane	1.0	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Chloroform	11	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
cis-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/25/08 16:45 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/25/08 16:45 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/25/08 16:45 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Toluene	0.17	ug/L	J	1.0		SW8260B	06/25/08 16:45 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Trichloroethene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Trichlorofluoromethane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/25/08 16:45 / jdh

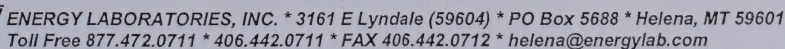
Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

J - Estimated value. The analyte was present but less than the reporting limit.



Report Date: 07/12/08
Collection Date: 06/19/08 10:30
DateReceived: 06/19/08
Matrix: Aqueous

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-015
Client Sample ID: TB06/05/08 JM 102207-3

Report Date: 07/12/08
Collection Date: 06/17/08 11:00
Date Received: 06/19/08
Matrix: Trip Blank

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	ug/L		20		SW8260B	06/25/08 14:45 / jdh
Acrylonitrile	ND	ug/L		20		SW8260B	06/25/08 14:45 / jdh
Benzene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Bromochloromethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Bromodichloromethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Bromofom	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Bromomethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Carbon disulfide	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Chlorobenzene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Chloroethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Chloroform	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Chloromethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
1,2-Dibromo-3-chloropropane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Dibromomethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
trans-1,4-Dichloro-2-butene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
cis-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Ethylbenzene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
2-Hexanone	ND	ug/L		20		SW8260B	06/25/08 14:45 / jdh
Iodomethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Methyl ethyl ketone	ND	ug/L		20		SW8260B	06/25/08 14:45 / jdh
Methyl isobutyl ketone	ND	ug/L		20		SW8260B	06/25/08 14:45 / jdh
Methylene chloride	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Styrene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Tetrachloroethene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Toluene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H08060394-015
Client Sample ID: TB06/05/08 JM 102207-3

Report Date: 07/12/08
Collection Date: 06/17/08 11:00
Date Received: 06/19/08
Matrix: Trip Blank

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichloroethene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Trichlorofluoromethane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Vinyl acetate	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Vinyl chloride	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
m+p-Xylenes	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
o-Xylene	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Xylenes, Total	ND	ug/L		1.0		SW8260B	06/25/08 14:45 / jdh
Surr: 1,2-Dichloroethane-d4	98.0	%REC		70-130		SW8260B	06/25/08 14:45 / jdh
Surr: Dibromofluoromethane	99.0	%REC		70-130		SW8260B	06/25/08 14:45 / jdh
Surr: p-Bromofluorobenzene	81.0	%REC		70-130		SW8260B	06/25/08 14:45 / jdh
Surr: Toluene-d8	105	%REC		70-130		SW8260B	06/25/08 14:45 / jdh

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QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B							Batch: 080620A-COND-PROBE-W		
Sample ID: LCS1_080620A	Laboratory Control Sample				Run: COND_080620A		06/20/08 14:59		
Conductivity	714	umhos/cm	1.0	99	90	110			
Sample ID: H08060394-009ADUP	Sample Duplicate				Run: COND_080620A		06/20/08 15:17		
Conductivity	3700	umhos/cm	1.0				0.5	10	
Method: A4500-H B							Analytical Run: PH_080620A		
Sample ID: CCV1_080620A	Continuing Calibration Verification Standard						06/20/08 10:33		
pH	10.0	s.u.	0.10	100	99	101			
Sample ID: CCV2_080620A	Continuing Calibration Verification Standard						06/20/08 10:47		
pH	10.0	s.u.	0.10	100	99	101			
Method: A4500-H B							Batch: 080620A-PH-W		
Sample ID: LCS1_080620A	Laboratory Control Sample				Run: PH_080620A		06/20/08 10:16		
pH	7.06	s.u.	0.10	101	99	101			
Sample ID: H08060394-006ADUP	Sample Duplicate				Run: PH_080620A		06/20/08 10:43		
pH	7.36	s.u.	0.10				0.5	2	
Qualifiers:									
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Report Date: 07/12/08
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Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: B_R113053		
Sample ID: MB-TJADIS080626A	Method Blank		Run: SUB-B113053				06/26/08 12:26		
Barium	ND	mg/L	0.0002						
Beryllium	ND	mg/L	0.0002						
Chromium	ND	mg/L	0.004						
Cobalt	ND	mg/L	0.003						
Copper	ND	mg/L	0.007						
Iron	ND	mg/L	0.005						
Nickel	ND	mg/L	0.004						
Silver	0.008	mg/L	0.004						
Vanadium	ND	mg/L	0.006						
Zinc	0.001	mg/L	0.001						
Sample ID: LFB-TJADIS080626A	Laboratory Fortified Blank		Run: SUB-B113053				06/26/08 12:30		
Barium	1.04	mg/L	0.10	104	85	115			
Beryllium	0.525	mg/L	0.010	105	85	115			
Chromium	0.966	mg/L	0.050	97	85	115			
Cobalt	0.991	mg/L	0.020	99	85	115			
Copper	0.956	mg/L	0.010	96	85	115			
Iron	4.87	mg/L	0.030	97	85	115			
Nickel	0.971	mg/L	0.050	97	85	115			
Silver	0.471	mg/L	0.010	93	85	115			
Vanadium	0.980	mg/L	0.10	98	85	115			
Zinc	0.995	mg/L	0.010	99	85	115			
Sample ID: B08062376-004CMS2	Sample Matrix Spike		Run: SUB-B113053				06/27/08 03:18		
Barium	1.075	mg/L	0.10	106	70	130			
Beryllium	0.5371	mg/L	0.0010	107	70	130			
Chromium	1.000	mg/L	0.010	100	70	130			
Cobalt	1.029	mg/L	0.010	103	70	130			
Copper	0.9927	mg/L	0.010	99	70	130			
Iron	5.374	mg/L	0.030	102	70	130			
Nickel	1.002	mg/L	0.010	100	70	130			
Silver	0.1568	mg/L	0.0050	31	70	130			S
Vanadium	1.020	mg/L	0.10	101	70	130			
Zinc	1.052	mg/L	0.010	105	70	130			
Sample ID: B08062376-004CMSD2	Sample Matrix Spike Duplicate		Run: SUB-B113053				06/27/08 03:21		
Barium	1.085	mg/L	0.10	107	70	130	0.9	20	
Beryllium	0.5436	mg/L	0.0010	109	70	130	1.2	20	
Chromium	1.000	mg/L	0.010	100	70	130	0.0	20	
Cobalt	1.030	mg/L	0.010	103	70	130	0.0	20	
Copper	0.9965	mg/L	0.010	100	70	130	0.4	20	
Iron	5.328	mg/L	0.030	101	70	130	0.9	20	
Nickel	0.9991	mg/L	0.010	100	70	130	0.3	20	
Silver	0.1563	mg/L	0.0050	31	70	130	0.3	20	S

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S - Spike recovery outside of advisory limits.



QA/QC Summary Report

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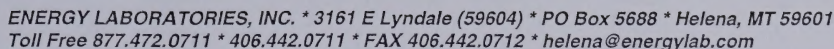
Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: B_R113053		
Sample ID: B08062376-004CMSD2	Sample Matrix Spike Duplicate			Run: SUB-B113053			06/27/08 03:21		
Vanadium	1.031	mg/L	0.10	102	70	130	1.0	20	
Zinc	1.052	mg/L	0.010	105	70	130	0.0	20	
Sample ID: H08060394-009C	Sample Matrix Spike			Run: SUB-B113053			06/27/08 04:11		
Barium	5.420	mg/L	0.10	108	70	130			
Beryllium	2.699	mg/L	0.0012	108	70	130			
Chromium	4.980	mg/L	0.021	100	70	130			
Cobalt	5.156	mg/L	0.015	103	70	130			
Copper	4.970	mg/L	0.034	99	70	130			
Iron	27.47	mg/L	0.030	99	70	130			
Nickel	5.043	mg/L	0.023	99	70	130			
Silver	2.539	mg/L	0.021	102	70	130			
Vanadium	5.675	mg/L	0.10	103	70	130			
Zinc	5.202	mg/L	0.010	104	70	130			
Sample ID: H08060394-009C	Sample Matrix Spike Duplicate			Run: SUB-B113053			06/27/08 04:14		
Barium	5.356	mg/L	0.10	106	70	130	1.2	20	
Beryllium	2.676	mg/L	0.0012	107	70	130	0.9	20	
Chromium	4.952	mg/L	0.021	99	70	130	0.6	20	
Cobalt	5.113	mg/L	0.015	102	70	130	0.8	20	
Copper	4.910	mg/L	0.034	98	70	130	1.2	20	
Iron	27.17	mg/L	0.030	98	70	130	1.1	20	
Nickel	5.016	mg/L	0.023	98	70	130	0.5	20	
Silver	2.503	mg/L	0.021	100	70	130	1.4	20	
Vanadium	5.627	mg/L	0.10	102	70	130	0.9	20	
Zinc	5.158	mg/L	0.010	103	70	130	0.8	20	
Sample ID: B08062417-002BMS2	Sample Matrix Spike			Run: SUB-B113053			06/27/08 05:31		
Barium	1.961	mg/L	0.10	103	70	130			
Beryllium	0.5460	mg/L	0.0010	109	70	130			
Chromium	1.016	mg/L	0.010	102	70	130			
Cobalt	1.032	mg/L	0.010	103	70	130			
Copper	0.9958	mg/L	0.010	100	70	130			
Iron	5.081	mg/L	0.030	101	70	130			
Nickel	1.017	mg/L	0.010	101	70	130			
Silver	0.1234	mg/L	0.0050	25	70	130			S
Vanadium	1.033	mg/L	0.10	103	70	130			
Zinc	1.042	mg/L	0.010	104	70	130			
Sample ID: B08062417-002BMSD2	Sample Matrix Spike Duplicate			Run: SUB-B113053			06/27/08 05:34		
Barium	1.950	mg/L	0.10	102	70	130	0.6	20	
Beryllium	0.5439	mg/L	0.0010	109	70	130	0.4	20	
Chromium	1.019	mg/L	0.010	102	70	130	0.3	20	
Cobalt	1.031	mg/L	0.010	102	70	130	0.2	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



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Project: 1273 City of Helena

Report Date: 07/12/08
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 RL - Analyte reporting limit.
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QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Analytical Run: SUB-B113168		
Sample ID: QCS - ME080125B, ME08 Initial Calibration Verification Standard 06/27/08 12:16									
Antimony	0.052	mg/L	0.050	104	90	110			
Arsenic	0.051	mg/L	0.0050	101	90	110			
Beryllium	0.026	mg/L	0.0010	102	90	110			
Cadmium	0.026	mg/L	0.0010	103	90	110			
Chromium	0.051	mg/L	0.010	102	90	110			
Cobalt	0.050	mg/L	0.010	101	90	110			
Copper	0.048	mg/L	0.010	96	90	110			
Lead	0.051	mg/L	0.010	101	90	110			
Nickel	0.050	mg/L	0.010	100	90	110			
Selenium	0.050	mg/L	0.0050	100	90	110			
Silver	0.025	mg/L	0.0050	101	90	110			
Thallium	0.050	mg/L	0.10	101	90	110			
Zinc	0.049	mg/L	0.010	99	90	110			
Sample ID: QCS - ME080125B, ME08 Initial Calibration Verification Standard 06/28/08 09:06									
Antimony	0.051	mg/L	0.050	102	90	110			
Arsenic	0.052	mg/L	0.0050	104	90	110			
Beryllium	0.027	mg/L	0.0010	107	90	110			
Cadmium	0.025	mg/L	0.0010	100	90	110			
Chromium	0.051	mg/L	0.010	103	90	110			
Cobalt	0.051	mg/L	0.010	102	90	110			
Copper	0.050	mg/L	0.010	100	90	110			
Lead	0.051	mg/L	0.010	102	90	110			
Nickel	0.051	mg/L	0.010	101	90	110			
Selenium	0.051	mg/L	0.0050	103	90	110			
Silver	0.025	mg/L	0.0050	102	90	110			
Thallium	0.051	mg/L	0.10	102	90	110			
Zinc	0.051	mg/L	0.010	102	90	110			
Sample ID: QCS - ME080125B, ME08 Initial Calibration Verification Standard 06/29/08 00:17									
Antimony	0.051	mg/L	0.050	103	90	110			
Arsenic	0.051	mg/L	0.0050	102	90	110			
Beryllium	0.025	mg/L	0.0010	101	90	110			
Cadmium	0.025	mg/L	0.0010	101	90	110			
Chromium	0.051	mg/L	0.010	101	90	110			
Cobalt	0.050	mg/L	0.010	99	90	110			
Copper	0.049	mg/L	0.010	98	90	110			
Lead	0.050	mg/L	0.010	101	90	110			
Nickel	0.050	mg/L	0.010	99	90	110			
Selenium	0.051	mg/L	0.0050	101	90	110			
Silver	0.026	mg/L	0.0050	102	90	110			
Thallium	0.051	mg/L	0.10	101	90	110			
Zinc	0.051	mg/L	0.010	103	90	110			

Qualifiers:

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Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Analytical Run: SUB-B113168		
Sample ID: QCS - ME080125B, ME08 Initial Calibration Verification Standard							06/29/08 11:22		
Antimony	0.052	mg/L	0.050	105	90	110			
Arsenic	0.051	mg/L	0.0050	103	90	110			
Beryllium	0.024	mg/L	0.0010	96	90	110			
Cadmium	0.025	mg/L	0.0010	101	90	110			
Chromium	0.052	mg/L	0.010	103	90	110			
Cobalt	0.050	mg/L	0.010	100	90	110			
Copper	0.049	mg/L	0.010	98	90	110			
Lead	0.051	mg/L	0.010	102	90	110			
Nickel	0.050	mg/L	0.010	100	90	110			
Selenium	0.050	mg/L	0.0050	101	90	110			
Silver	0.026	mg/L	0.0050	104	90	110			
Thallium	0.051	mg/L	0.10	101	90	110			
Zinc	0.051	mg/L	0.010	103	90	110			

Method: E200.8							Batch: B_R113168		
Sample ID: LRB Method Blank							Run: SUB-B113168		
							06/27/08 18:05		
Antimony	ND	mg/L	1E-05						
Arsenic	ND	mg/L	4E-05						
Beryllium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	9E-06						
Chromium	ND	mg/L	4E-05						
Cobalt	ND	mg/L	1E-05						
Copper	0.0001	mg/L	7E-05						
Lead	2E-05	mg/L	8E-06						
Nickel	ND	mg/L	3E-05						
Selenium	ND	mg/L	0.0001						
Silver	ND	mg/L	3E-05						
Thallium	ND	mg/L	7E-06						
Zinc	0.001	mg/L	3E-05						

Sample ID: LFB Laboratory Fortified Blank							Run: SUB-B113168		
							06/27/08 18:13		
Antimony	0.054	mg/L	0.050	107	85	115			
Arsenic	0.051	mg/L	0.0050	102	85	115			
Beryllium	0.051	mg/L	0.0010	103	85	115			
Cadmium	0.052	mg/L	0.0010	103	85	115			
Chromium	0.052	mg/L	0.010	104	85	115			
Cobalt	0.052	mg/L	0.010	105	85	115			
Copper	0.052	mg/L	0.010	104	85	115			
Lead	0.053	mg/L	0.010	105	85	115			
Nickel	0.052	mg/L	0.010	103	85	115			
Selenium	0.051	mg/L	0.0050	101	85	115			
Silver	0.021	mg/L	0.0050	105	85	115			
Thallium	0.053	mg/L	0.10	105	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

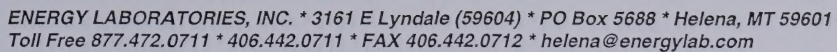
Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: B_R113168		
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-B113168				06/27/08 18:13		
Zinc	0.052	mg/L	0.010	102	85	115			
Sample ID: B08062653-007BMS	Sample Matrix Spike		Run: SUB-B113168				06/29/08 06:28		
Antimony	0.048	mg/L	0.0030	95	70	130			
Arsenic	0.062	mg/L	0.0010	97	70	130			
Cadmium	0.048	mg/L	0.0010	96	70	130			
Copper	0.080	mg/L	0.010	91	70	130			
Lead	0.049	mg/L	0.0010	95	70	130			
Silver	0.014	mg/L	0.0050	72	70	130			
Thallium	0.048	mg/L	0.0010	95	70	130			
Zinc	0.057	mg/L	0.010	90	70	130			
Sample ID: B08062653-007BMSD	Sample Matrix Spike Duplicate		Run: SUB-B113168				06/29/08 06:35		
Antimony	0.047	mg/L	0.0030	93	70	130	2.5	20	
Arsenic	0.063	mg/L	0.0010	100	70	130	2.1	20	
Cadmium	0.048	mg/L	0.0010	97	70	130	1.0	20	
Copper	0.081	mg/L	0.010	94	70	130	2.2	20	
Lead	0.049	mg/L	0.0010	96	70	130	0.6	20	
Silver	0.015	mg/L	0.0050	77	70	130	7.1	20	
Thallium	0.048	mg/L	0.0010	95	70	130	0.3	20	
Zinc	0.058	mg/L	0.010	93	70	130	2.3	20	
Sample ID: H08060394-005C	Sample Matrix Spike		Run: SUB-B113168				06/29/08 08:08		
Antimony	0.05125	mg/L	0.0050	102	70	130			
Arsenic	0.04869	mg/L	0.0050	95	70	130			
Beryllium	0.04528	mg/L	0.0010	91	70	130			
Cadmium	0.04640	mg/L	0.0010	93	70	130			
Chromium	0.04699	mg/L	0.010	93	70	130			
Cobalt	0.04600	mg/L	0.010	90	70	130			
Copper	0.04444	mg/L	0.010	88	70	130			
Lead	0.04716	mg/L	0.010	94	70	130			
Nickel	0.04572	mg/L	0.010	89	70	130			
Selenium	0.04805	mg/L	0.0050	93	70	130			
Silver	0.01311	mg/L	0.0050	66	70	130			
Thallium	0.04736	mg/L	0.0050	95	70	130			
Zinc	0.04868	mg/L	0.010	92	70	130			
Sample ID: H08060394-005C	Sample Matrix Spike Duplicate		Run: SUB-B113168				06/29/08 08:16		
Antimony	0.05417	mg/L	0.0050	108	70	130	5.5	20	
Arsenic	0.04876	mg/L	0.0050	95	70	130	0.1	20	
Beryllium	0.04232	mg/L	0.0010	85	70	130	6.8	20	
Cadmium	0.04658	mg/L	0.0010	93	70	130	0.4	20	
Chromium	0.04575	mg/L	0.010	91	70	130	2.7	20	
Cobalt	0.04397	mg/L	0.010	86	70	130	4.5	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



Report Date: 07/12/08
Work Order: H08060394

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Analytical Run: SUB-B113198		
Sample ID: QCS - ME080125B, ME08 Initial Calibration Verification Standard							06/29/08 16:08		
Antimony	0.051	mg/L	0.050	102	90	110			
Arsenic	0.052	mg/L	0.0050	104	90	110			
Cadmium	0.025	mg/L	0.0010	102	90	110			
Lead	0.053	mg/L	0.010	105	90	110			
Mercury	0.0020	mg/L	0.0010	101	90	110			
Thallium	0.053	mg/L	0.10	106	90	110			
Method: E200.8							Batch: B_R113198		
Sample ID: LRB Method Blank							Run: SUB-B113198		
							06/29/08 16:39		
Antimony	0.0001	mg/L	1E-05						
Arsenic	ND	mg/L	4E-05						
Cadmium	5E-05	mg/L	9E-06						
Lead	4E-05	mg/L	8E-06						
Mercury	1E-05	mg/L	1E-05						
Thallium	9E-05	mg/L	7E-06						
Sample ID: LFB Laboratory Fortified Blank							Run: SUB-B113198		
							06/29/08 16:55		
Antimony	0.05268	mg/L	0.0050	105	85	115			
Arsenic	0.04968	mg/L	0.0050	99	85	115			
Cadmium	0.04978	mg/L	0.0010	99	85	115			
Lead	0.05085	mg/L	0.010	102	85	115			
Mercury	0.0009900	mg/L	0.0010	98	85	115			
Thallium	0.05041	mg/L	0.0050	101	85	115			
Sample ID: B08062437-001BMS Sample Matrix Spike							Run: SUB-B113198		
							06/29/08 20:46		
Antimony	0.05937	mg/L	0.0050	119	70	130			
Arsenic	0.05441	mg/L	0.0050	108	70	130			
Cadmium	0.04975	mg/L	0.0010	100	70	130			
Lead	0.05144	mg/L	0.010	103	70	130			
Mercury	0.002560	mg/L	0.0010	197	70	130			S
Thallium	0.05138	mg/L	0.0050	103	70	130			
Sample ID: B08062437-001BMSD Sample Matrix Spike Duplicate							Run: SUB-B113198		
							06/29/08 20:54		
Antimony	0.05848	mg/L	0.0050	117	70	130	1.5	20	
Arsenic	0.05328	mg/L	0.0050	105	70	130	2.1	20	
Cadmium	0.04993	mg/L	0.0010	100	70	130	0.4	20	
Lead	0.05133	mg/L	0.010	103	70	130	0.2	20	
Mercury	0.002534	mg/L	0.0010	194	70	130	1.0	20	S
Thallium	0.05156	mg/L	0.0050	103	70	130	0.3	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Analytical Run: SUB-B113319		
Sample ID: QCS - ME080125B, ME08 Initial Calibration Verification Standard							06/30/08 14:04		
Antimony	0.051	mg/L	0.050	102	90	110			
Arsenic	0.051	mg/L	0.0050	102	90	110			
Beryllium	0.025	mg/L	0.0010	102	90	110			
Cadmium	0.025	mg/L	0.0010	100	90	110			
Copper	0.049	mg/L	0.010	98	90	110			
Lead	0.051	mg/L	0.010	101	90	110			
Mercury	0.0020	mg/L	0.0010	101	90	110			
Selenium	0.051	mg/L	0.0050	102	90	110			
Silver	0.025	mg/L	0.0050	100	90	110			
Thallium	0.051	mg/L	0.10	101	90	110			
Sample ID: QCS - ME080125B, ME08 Initial Calibration Verification Standard							07/01/08 01:10		
Antimony	0.052	mg/L	0.050	103	90	110			
Arsenic	0.051	mg/L	0.0050	103	90	110			
Beryllium	0.025	mg/L	0.0010	101	90	110			
Cadmium	0.026	mg/L	0.0010	103	90	110			
Copper	0.050	mg/L	0.010	99	90	110			
Lead	0.052	mg/L	0.010	103	90	110			
Mercury	0.0020	mg/L	0.0010	101	90	110			
Selenium	0.051	mg/L	0.0050	102	90	110			
Silver	0.025	mg/L	0.0050	101	90	110			
Thallium	0.051	mg/L	0.10	102	90	110			
Method: E200.8							Batch: B_R113319		
Sample ID: LRB Method Blank							Run: SUB-B113319		06/30/08 15:07
Antimony	3E-05	mg/L	1E-05						
Arsenic	ND	mg/L	4E-05						
Beryllium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	9E-06						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	8E-06						
Mercury	ND	mg/L	1E-05						
Selenium	0.0003	mg/L	0.0001						
Silver	ND	mg/L	3E-05						
Thallium	2E-05	mg/L	7E-06						
Sample ID: LFB Laboratory Fortified Blank							Run: SUB-B113319		06/30/08 15:15
Antimony	0.049	mg/L	0.050	99	85	115			
Arsenic	0.050	mg/L	0.0050	100	85	115			
Beryllium	0.051	mg/L	0.0010	102	85	115			
Cadmium	0.049	mg/L	0.0010	98	85	115			
Copper	0.051	mg/L	0.010	103	85	115			
Lead	0.052	mg/L	0.010	103	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: B_R113319		
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-B113319				06/30/08 15:15		
Mercury	0.00097	mg/L	0.0010	97	85	115			
Selenium	0.050	mg/L	0.0050	99	85	115			
Silver	0.018	mg/L	0.0050	92	85	115			
Thallium	0.051	mg/L	0.10	103	85	115			
Sample ID: B08070047-003BDUP	Sample Duplicate		Run: SUB-B113319				07/01/08 09:40		
Antimony	5.000E-05	mg/L	0.0050				0.0	20	
Arsenic	0.000840Q	mg/L	0.0050				0.0	20	
Beryllium	ND	mg/L	0.0010				0.0	20	
Cadmium	0.0002590	mg/L	0.0010				0.0	20	
Copper	0.0006660	mg/L	0.010				0.0	20	
Lead	3.600E-05	mg/L	0.010				0.0	20	
Mercury	ND	mg/L	0.0010				0.0	20	
Selenium	ND	mg/L	0.0050				0.0	20	
Silver	ND	mg/L	0.0050				0.0	20	
Thallium	ND	mg/L	0.0050				0.0	20	
Sample ID: H08060394-002C	Sample Matrix Spike		Run: SUB-B113319				06/30/08 23:21		
Antimony	0.05273	mg/L	0.0050	105	70	130			
Arsenic	0.05414	mg/L	0.0050	104	70	130			
Beryllium	0.04364	mg/L	0.0010	87	70	130			
Cadmium	0.04981	mg/L	0.0010	100	70	130			
Copper	0.04643	mg/L	0.010	91	70	130			
Lead	0.05127	mg/L	0.010	102	70	130			
Mercury	0.001060	mg/L	0.0010	106	70	130			
Selenium	0.05686	mg/L	0.0050	111	70	130			
Silver	0.01245	mg/L	0.0050	62	70	130			S
Thallium	0.05200	mg/L	0.0050	104	70	130			
Sample ID: H08060394-002C	Sample Matrix Spike Duplicate		Run: SUB-B113319				06/30/08 23:29		
Antimony	0.05209	mg/L	0.0050	103	70	130	1.2	20	
Arsenic	0.05503	mg/L	0.0050	106	70	130	1.6	20	
Beryllium	0.04256	mg/L	0.0010	85	70	130	2.5	20	
Cadmium	0.04928	mg/L	0.0010	99	70	130	1.1	20	
Copper	0.04644	mg/L	0.010	91	70	130	0.0	20	
Lead	0.05055	mg/L	0.010	101	70	130	1.4	20	
Mercury	0.0009600	mg/L	0.0010	96	70	130	0.0	20	
Selenium	0.05712	mg/L	0.0050	112	70	130	0.5	20	
Silver	0.01381	mg/L	0.0050	69	70	130	10	20	S
Thallium	0.05140	mg/L	0.0050	103	70	130	1.2	20	
Sample ID: B08062379-011CMS	Sample Matrix Spike		Run: SUB-B113319				07/01/08 03:37		
Antimony	0.05229	mg/L	0.0050	104	70	130			
Arsenic	0.05355	mg/L	0.0050	104	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: B_R113319		
Sample ID: B08062379-011CMS	Sample Matrix Spike		Run: SUB-B113319				07/01/08 03:37		
Beryllium	0.05030	mg/L	0.0010	101	70	130			
Cadmium	0.05012	mg/L	0.0010	100	70	130			
Copper	0.05202	mg/L	0.010	96	70	130			
Lead	0.05226	mg/L	0.010	103	70	130			
Mercury	0.001040	mg/L	0.0010	100	70	130			
Selenium	0.05241	mg/L	0.0050	103	70	130			
Silver	0.01611	mg/L	0.0050	81	70	130			
Thallium	0.05202	mg/L	0.0050	104	70	130			
Sample ID: B08062379-011CMSD	Sample Matrix Spike Duplicate		Run: SUB-B113319				07/01/08 03:44		
Antimony	0.05166	mg/L	0.0050	103	70	130	1.2	20	
Arsenic	0.05272	mg/L	0.0050	102	70	130	1.6	20	
Beryllium	0.04974	mg/L	0.0010	99	70	130	1.1	20	
Cadmium	0.05023	mg/L	0.0010	100	70	130	0.2	20	
Copper	0.05128	mg/L	0.010	94	70	130	1.4	20	
Lead	0.05146	mg/L	0.010	101	70	130	1.5	20	
Mercury	0.001010	mg/L	0.0010	97	70	130	2.9	20	
Selenium	0.05188	mg/L	0.0050	102	70	130	1.0	20	
Silver	0.01798	mg/L	0.0050	90	70	130	11	20	
Thallium	0.05090	mg/L	0.0050	102	70	130	2.2	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Analytical Run: IC101-H_080629A		
Sample ID: ICV-ICICV050908	Initial Calibration Verification Standard							06/29/08 18:22	
Chloride	25	mg/L	1.0	102	90	110			
Sulfate	100	mg/L	1.0	104	90	110			
Sample ID: CCV-ICCCV060208	Continuing Calibration Verification Standard							06/30/08 00:12	
Chloride	26	mg/L	1.0	103	90	110			
Sulfate	100	mg/L	1.0	103	90	110			
Sample ID: CCV-ICCCV060208	Continuing Calibration Verification Standard							06/30/08 04:44	
Chloride	25	mg/L	1.0	101	90	110			
Sulfate	100	mg/L	1.0	101	90	110			
Sample ID: CCV-ICCCV061008	Continuing Calibration Verification Standard							06/30/08 09:16	
Chloride	25	mg/L	1.0	101	90	110			
Sulfate	100	mg/L	1.0	102	90	110			
Method: E300.0							Batch: R46312		
Sample ID: LFB	Laboratory Fortified Blank				Run: IC101-H_080629A			06/29/08 19:20	
Chloride	9.9	mg/L	1.0	98	90	110			
Sulfate	40	mg/L	1.0	99	90	110			
Sample ID: MBLK	Method Blank				Run: IC101-H_080629A			06/29/08 19:40	
Chloride	0.04	mg/L							
Sulfate	0.07	mg/L							
Sample ID: H08060387-005AMS	Sample Matrix Spike				Run: IC101-H_080629A			06/30/08 02:47	
Chloride	37	mg/L	1.0	102	90	110			
Sulfate	140	mg/L	1.0	106	90	110			
Sample ID: H08060387-005AMSD	Sample Matrix Spike Duplicate				Run: IC101-H_080629A			06/30/08 03:07	
Chloride	37	mg/L	1.0	102	90	110			
Sulfate	140	mg/L	1.0	106	90	110			
Sample ID: H08060394-010AMS	Sample Matrix Spike				Run: IC101-H_080629A			06/30/08 07:39	
Chloride	73	mg/L	1.0	90	90	110			
Sulfate	260	mg/L	1.0	104	90	110			
Sample ID: H08060394-010ASMSD	Sample Matrix Spike Duplicate				Run: IC101-H_080629A			06/30/08 07:58	
Chloride	73	mg/L	1.0	90	90	110			
Sulfate	260	mg/L	1.0	104	90	110			
Sample ID: H08060406-003AMS	Sample Matrix Spike				Run: IC101-H_080629A			06/30/08 11:12	
Chloride	35	mg/L	1.0	99	90	110			
Sulfate	900	mg/L	1.0		90	110			A

Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R46312		
Sample ID: H08060406-003AMSD	Sample Matrix Spike Duplicate				Run: IC101-H_080629A		06/30/08 11:32		
Chloride	35	mg/L	1.0	98	90	110			
Sulfate	900	mg/L	1.0		90	110			A
Method: E353.2							Analytical Run: NUTRIENTS_080620B		
Sample ID: ICV-1	Initial Calibration Verification Standard						06/20/08 12:04		
Nitrogen, Nitrate+Nitrite as N	1.000	mg/L	0.050	100	90	110			
Sample ID: CCV-71	Continuing Calibration Verification Standard						06/20/08 14:24		
Nitrogen, Nitrate+Nitrite as N	0.4800	mg/L	0.050	96	90	110			
Sample ID: CCV-83	Continuing Calibration Verification Standard						06/20/08 14:48		
Nitrogen, Nitrate+Nitrite as N	0.4700	mg/L	0.050	94	90	110			
Sample ID: CCV-95	Continuing Calibration Verification Standard						06/20/08 15:12		
Nitrogen, Nitrate+Nitrite as N	0.4700	mg/L	0.050	94	90	110			
Method: E353.2							Batch: A2008-06-20_5_NO3_01		
Sample ID: LCS-2	Laboratory Control Sample				Run: NUTRIENTS_080620B		06/20/08 12:06		
Nitrogen, Nitrate+Nitrite as N	16.40	mg/L	0.095	108	90	110			
Sample ID: LFB-3	Laboratory Fortified Blank				Run: NUTRIENTS_080620B		06/20/08 12:08		
Nitrogen, Nitrate+Nitrite as N	0.5400	mg/L	0.050	106	90	110			
Sample ID: MBLK-6	Method Blank				Run: NUTRIENTS_080620B		06/20/08 12:14		
Nitrogen, Nitrate+Nitrite as N	0.01	mg/L	0.010						
Sample ID: H08060351-004AMS	Sample Matrix Spike				Run: NUTRIENTS_080620B		06/20/08 13:20		
Nitrogen, Nitrate+Nitrite as N	0.8800	mg/L	0.050	88	90	110			S
Sample ID: H08060351-004AMSD	Sample Matrix Spike Duplicate				Run: NUTRIENTS_080620B		06/20/08 13:22		
Nitrogen, Nitrate+Nitrite as N	0.9000	mg/L	0.050	90	90	110	2.2	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E410.4									Batch: R46140
Sample ID: MB-R46140	Method Blank				Run: SPECTRO_080623A				06/23/08 14:00
Oxygen Demand, Chemical (COD)	ND	mg/L							
Sample ID: LCS-R46140	Laboratory Control Sample				Run: SPECTRO_080623A				06/23/08 14:00
Oxygen Demand, Chemical (COD)	320	mg/L	1.0	107	90	110			
Sample ID: H08060281-004C MS	Sample Matrix Spike				Run: SPECTRO_080623A				06/23/08 14:00
Oxygen Demand, Chemical (COD)	52	mg/L	1.0	104	90	110			
Sample ID: H08060281-004C MSD	Sample Matrix Spike Duplicate				Run: SPECTRO_080623A				06/23/08 14:00
Oxygen Demand, Chemical (COD)	52	mg/L	1.0	103	90	110	0.6	20	
Sample ID: H08060332-002C DUP	Sample Duplicate				Run: SPECTRO_080623A				06/23/08 14:00
Oxygen Demand, Chemical (COD)	50	mg/L	1.0				23	20	R
Method: Kelada mod									Batch: B_33203
Sample ID: LCS-34	Laboratory Control Sample				Run: SUB-B113067				06/26/08 16:46
Cyanide, Total	0.0973	mg/L	0.0050	97	90	110			
Sample ID: MBLK-35	Method Blank				Run: SUB-B113067				06/26/08 16:48
Cyanide, Total	ND	mg/L	0.003						
Sample ID: B08062379-011DMS	Sample Matrix Spike				Run: SUB-B113067				06/26/08 17:38
Cyanide, Total	0.111	mg/L	0.0050	98	90	110			
Sample ID: B08062379-011DMSD	Sample Matrix Spike Duplicate				Run: SUB-B113067				06/26/08 17:40
Cyanide, Total	0.111	mg/L	0.0050	98	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: Kelada mod							Analytical Run: SUB-B112904		
Sample ID: ICV-1	Initial Calibration Verification Standard								06/24/08 09:14
Cyanide, Total	0.147	mg/L	0.0050	98	90	110			
Method: Kelada mod							Batch: B_R112904		
Sample ID: LFB-4	Laboratory Fortified Blank								06/24/08 09:19
Cyanide, Total	0.101	mg/L	0.0050	101	90	110			
Sample ID: MBLK-5	Method Blank								06/24/08 09:21
Cyanide, Total	ND	mg/L	0.003						
Sample ID: H08060394-002D	Sample Matrix Spike								06/24/08 14:13
Cyanide, Total	0.112	mg/L	0.0050	112	90	110			S
Sample ID: H08060394-002D	Sample Matrix Spike Duplicate								06/24/08 14:14
Cyanide, Total	0.108	mg/L	0.0050	108	90	110			
Sample ID: H08060394-012D	Sample Matrix Spike								06/24/08 15:06
Cyanide, Total	0.112	mg/L	0.0050	112	90	110			S
Sample ID: H08060394-012D	Sample Matrix Spike Duplicate								06/24/08 15:08
Cyanide, Total	0.119	mg/L	0.0050	119	90	110			S
Sample ID: B08062393-001DMS	Sample Matrix Spike								06/24/08 16:04
Cyanide, Total	0.106	mg/L	0.0050	106	90	110			
Sample ID: B08062393-001DMSD	Sample Matrix Spike Duplicate								06/24/08 16:06
Cyanide, Total	0.108	mg/L	0.0050	108	90	110			
Method: Kelada mod							Analytical Run: SUB-B113067		
Sample ID: ICV-1	Initial Calibration Verification Standard								06/26/08 15:45
Cyanide, Total	0.147	mg/L	0.0050	98	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B		Analytical Run: 1SATURN_080623A							
Sample ID: CCV062308A	Continuing Calibration Verification Standard								06/23/08 09:12
Acetone	46.4	ug/L	20	93	70	130			
Acrylonitrile	41.2	ug/L	20	82	70	130			
Benzene	5.68	ug/L	1.0	114	70	130			
Bromochloromethane	4.84	ug/L	1.0	97	70	130			
Bromodichloromethane	5.12	ug/L	1.0	102	70	130			
Bromoform	4.96	ug/L	1.0	99	70	130			
Bromomethane	4.40	ug/L	1.0	88	70	130			
Carbon disulfide	5.68	ug/L	1.0	114	70	130			
Carbon tetrachloride	5.12	ug/L	1.0	102	70	130			
Chlorobenzene	5.16	ug/L	1.0	103	70	130			
Chlorodibromomethane	5.20	ug/L	1.0	104	70	130			
Chloroethane	5.24	ug/L	1.0	105	70	130			
Chloroform	4.88	ug/L	1.0	98	80	120			
Chloromethane	5.24	ug/L	1.0	105	70	130			
1,2-Dibromo-3-chloropropane	3.99	ug/L	1.0	80	70	130			
1,2-Dibromoethane	5.76	ug/L	1.0	115	70	130			
Dibromomethane	5.08	ug/L	1.0	102	70	130			
1,2-Dichlorobenzene	5.16	ug/L	1.0	103	70	130			
1,4-Dichlorobenzene	4.88	ug/L	1.0	98	70	130			
trans-1,4-Dichloro-2-butene	5.20	ug/L	1.0	104	70	130			
Dichlorodifluoromethane	4.92	ug/L	1.0	98	70	130			
1,1-Dichloroethane	5.12	ug/L	1.0	102	70	130			
1,2-Dichloroethane	4.36	ug/L	1.0	87	70	130			
1,1-Dichloroethene	4.88	ug/L	1.0	98	80	120			
cis-1,2-Dichloroethene	4.96	ug/L	1.0	99	70	130			
trans-1,2-Dichloroethene	5.16	ug/L	1.0	103	70	130			
1,2-Dichloropropane	5.76	ug/L	1.0	115	80	120			
cis-1,3-Dichloropropene	5.88	ug/L	1.0	118	70	130			
trans-1,3-Dichloropropene	5.56	ug/L	1.0	111	70	130			
Ethylbenzene	5.52	ug/L	1.0	110	80	120			
2-Hexanone	48.4	ug/L	20	97	70	130			
Iodomethane	4.92	ug/L	1.0	98	70	130			
Methyl ethyl ketone	43.6	ug/L	20	87	70	130			
Methyl isobutyl ketone	48.8	ug/L	20	98	70	130			
Methylene chloride	4.00	ug/L	1.0	80	70	130			
Styrene	5.32	ug/L	1.0	106	70	130			
1,1,1,2-Tetrachloroethane	5.76	ug/L	1.0	115	70	130			
1,1,2,2-Tetrachloroethane	4.64	ug/L	1.0	93	70	130			
Tetrachloroethene	5.76	ug/L	1.0	115	70	130			
Toluene	5.60	ug/L	1.0	112	80	120			
1,1,1-Trichloroethane	5.48	ug/L	1.0	110	70	130			
1,1,2-Trichloroethane	5.40	ug/L	1.0	108	70	130			
Trichloroethene	6.00	ug/L	1.0	120	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B					Analytical Run: 1SATURN_080623A				
Sample ID: CCV062308A	Continuing Calibration Verification Standard								06/23/08 09:12
Trichlorofluoromethane	4.84	ug/L	1.0	97	70	130			
1,2,3-Trichloropropane	5.44	ug/L	1.0	109	70	130			
Vinyl acetate	4.08	ug/L	1.0	82	70	130			
Vinyl chloride	4.76	ug/L	1.0	95	80	120			
m+p-Xylenes	10.4	ug/L	1.0	104	70	130			
o-Xylene	5.24	ug/L	1.0	105	70	130			
Xylenes, Total	15.6	ug/L	1.0	104	70	130			
Surr: 1,2-Dichloroethane-d4			1.0	82	70	130			
Surr: Dibromofluoromethane			1.0	97	70	130			
Surr: p-Bromofluorobenzene			1.0	86	70	130			
Surr: Toluene-d8			1.0	99	70	130			

Method: SW8260B					Batch: R46118				
Sample ID: LCS062308A	Laboratory Control Sample				Run: 1SATURN_080623A		06/23/08 10:01		
Acetone	46.4	ug/L	20	93	70	130			
Acrylonitrile	45.6	ug/L	20	91	70	130			
Benzene	5.68	ug/L	1.0	114	70	130			
Bromochloromethane	4.96	ug/L	1.0	99	70	130			
Bromodichloromethane	4.68	ug/L	1.0	94	70	130			
Bromoform	4.56	ug/L	1.0	91	70	130			
Bromomethane	4.60	ug/L	1.0	92	70	130			
Carbon disulfide	5.76	ug/L	1.0	115	70	130			
Carbon tetrachloride	5.12	ug/L	1.0	102	70	130			
Chlorobenzene	5.08	ug/L	1.0	102	70	130			
Chlorodibromomethane	4.84	ug/L	1.0	97	70	130			
Chloroethane	5.28	ug/L	1.0	106	70	130			
Chloroform	4.80	ug/L	1.0	96	70	130			
Chloromethane	4.84	ug/L	1.0	97	70	130			
1,2-Dibromo-3-chloropropane	4.12	ug/L	1.0	82	70	130			
1,2-Dibromoethane	5.24	ug/L	1.0	105	70	130			
Dibromomethane	4.64	ug/L	1.0	93	70	130			
1,2-Dichlorobenzene	4.76	ug/L	1.0	95	70	130			
1,4-Dichlorobenzene	4.68	ug/L	1.0	94	70	130			
trans-1,4-Dichloro-2-butene	4.76	ug/L	1.0	95	70	130			
Dichlorodifluoromethane	4.20	ug/L	1.0	84	70	130			
1,1-Dichloroethane	5.08	ug/L	1.0	102	70	130			
1,2-Dichloroethane	4.60	ug/L	1.0	92	70	130			
1,1-Dichloroethene	4.76	ug/L	1.0	95	70	130			
cis-1,2-Dichloroethene	4.88	ug/L	1.0	98	70	130			
trans-1,2-Dichloroethene	5.12	ug/L	1.0	102	70	130			
1,2-Dichloropropane	5.60	ug/L	1.0	112	70	130			
cis-1,3-Dichloropropene	5.52	ug/L	1.0	110	70	130			
trans-1,3-Dichloropropene	5.84	ug/L	1.0	117	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46118		
Sample ID: LCS062308A	Laboratory Control Sample				Run: 1SATURN_080623A		06/23/08 10:01		
Ethylbenzene	5.28	ug/L	1.0	106	70	130			
2-Hexanone	49.6	ug/L	20	99	70	130			
Iodomethane	5.08	ug/L	1.0	102	70	130			
Methyl ethyl ketone	46.0	ug/L	20	92	70	130			
Methyl isobutyl ketone	49.2	ug/L	20	98	70	130			
Methylene chloride	4.12	ug/L	1.0	82	70	130			
Styrene	5.12	ug/L	1.0	102	70	130			
1,1,1,2-Tetrachloroethane	5.44	ug/L	1.0	109	70	130			
1,1,2,2-Tetrachloroethane	4.20	ug/L	1.0	84	70	130			
Tetrachloroethene	5.32	ug/L	1.0	106	70	130			
Toluene	5.32	ug/L	1.0	106	70	130			
1,1,1-Trichloroethane	5.24	ug/L	1.0	105	70	130			
1,1,2-Trichloroethane	5.20	ug/L	1.0	104	70	130			
Trichloroethene	5.44	ug/L	1.0	109	70	130			
Trichlorofluoromethane	5.12	ug/L	1.0	102	70	130			
1,2,3-Trichloropropane	4.40	ug/L	1.0	88	70	130			
Vinyl acetate	4.60	ug/L	1.0	92	70	130			
Vinyl chloride	4.64	ug/L	1.0	93	70	130			
m+p-Xylenes	9.80	ug/L	1.0	98	70	130			
o-Xylene	5.20	ug/L	1.0	104	70	130			
Xylenes, Total	15.0	ug/L	1.0	100	70	130			
Surr: 1,2-Dichloroethane-d4			1.0	88	70	130			
Surr: Dibromofluoromethane			1.0	100	70	130			
Surr: p-Bromofluorobenzene			1.0	88	70	130			
Surr: Toluene-d8			1.0	95	70	130			
Sample ID: MBLK062308A	Method Blank				Run: 1SATURN_080623A		06/23/08 11:28		
Acetone	ND	ug/L	20						
Acrylonitrile	ND	ug/L	20						
Benzene	ND	ug/L	1.0						
Bromochloromethane	ND	ug/L	1.0						
Bromodichloromethane	ND	ug/L	1.0						
Bromoform	ND	ug/L	1.0						
Bromomethane	ND	ug/L	1.0						
Carbon disulfide	ND	ug/L	1.0						
Carbon tetrachloride	ND	ug/L	1.0						
Chlorobenzene	ND	ug/L	1.0						
Chlorodibromomethane	ND	ug/L	1.0						
Chloroethane	ND	ug/L	1.0						
Chloroform	ND	ug/L	1.0						
Chloromethane	ND	ug/L	1.0						
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0						
1,2-Dibromoethane	ND	ug/L	1.0						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46118		
Sample ID: MBLK062308A	Method Blank		Run: 1SATURN_080623A				06/23/08 11:28		
Dibromomethane	ND	ug/L	1.0						
1,2-Dichlorobenzene	ND	ug/L	1.0						
1,4-Dichlorobenzene	ND	ug/L	1.0						
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0						
Dichlorodifluoromethane	ND	ug/L	1.0						
1,1-Dichloroethane	ND	ug/L	1.0						
1,2-Dichloroethane	ND	ug/L	1.0						
1,1-Dichloroethene	ND	ug/L	1.0						
cis-1,2-Dichloroethene	ND	ug/L	1.0						
trans-1,2-Dichloroethene	ND	ug/L	1.0						
1,2-Dichloropropane	ND	ug/L	1.0						
cis-1,3-Dichloropropene	ND	ug/L	1.0						
trans-1,3-Dichloropropene	ND	ug/L	1.0						
Ethylbenzene	ND	ug/L	1.0						
2-Hexanone	ND	ug/L	20						
Iodomethane	ND	ug/L	1.0						
Methyl ethyl ketone	ND	ug/L	20						
Methyl isobutyl ketone	ND	ug/L	20						
Methylene chloride	ND	ug/L	1.0						
Styrene	ND	ug/L	1.0						
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0						
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0						
Tetrachloroethene	ND	ug/L	1.0						
Toluene	ND	ug/L	1.0						
1,1,1-Trichloroethane	ND	ug/L	1.0						
1,1,2-Trichloroethane	ND	ug/L	1.0						
Trichloroethene	ND	ug/L	1.0						
Trichlorofluoromethane	ND	ug/L	1.0						
1,2,3-Trichloropropane	ND	ug/L	1.0						
Vinyl acetate	ND	ug/L	1.0						
Vinyl chloride	ND	ug/L	1.0						
m+p-Xylenes	ND	ug/L	1.0						
o-Xylene	ND	ug/L	1.0						
Xylenes, Total	ND	ug/L	1.0						
Surr: 1,2-Dichloroethane-d4			1.0	91	70	130			
Surr: Dibromofluoromethane			1.0	94	70	130			
Surr: p-Bromofluorobenzene			1.0	86	70	130			
Surr: Toluene-d8			1.0	94	70	130			
Sample ID: H08060389-010AMS	Sample Matrix Spike		Run: 1SATURN_080623A				06/24/08 16:31		
Acetone	86.4	ug/L	40	86	70	130			
Acrylonitrile	97.6	ug/L	40	98	70	130			
Benzene	11.2	ug/L	2.0	112	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46118		
Sample ID: H08060389-010AMS		Sample Matrix Spike		Run: 1SATURN_080623A			06/24/08 16:31		
Bromochloromethane	9.04	ug/L	2.0	90	70	130			
Bromodichloromethane	10.6	ug/L	2.0	106	70	130			
Bromoform	9.76	ug/L	2.0	98	70	130			
Bromomethane	8.32	ug/L	2.0	83	70	130			
Carbon disulfide	10.4	ug/L	2.0	104	70	130			
Carbon tetrachloride	10.1	ug/L	2.0	101	70	130			
Chlorobenzene	10.3	ug/L	2.0	103	70	130			
Chlorodibromomethane	9.28	ug/L	2.0	93	70	130			
Chloroethane	8.32	ug/L	2.0	83	70	130			
Chloroform	9.76	ug/L	2.0	89	70	130			
Chloromethane	6.34	ug/L	2.0	63	70	130			S
1,2-Dibromo-3-chloropropane	8.56	ug/L	2.0	86	70	130			
1,2-Dibromoethane	9.76	ug/L	2.0	98	70	130			
Dibromomethane	11.1	ug/L	2.0	111	70	130			
1,2-Dichlorobenzene	10.5	ug/L	2.0	105	70	130			
1,4-Dichlorobenzene	9.36	ug/L	2.0	94	70	130			
trans-1,4-Dichloro-2-butene	7.63	ug/L	2.0	76	70	130			
Dichlorodifluoromethane	7.76	ug/L	2.0	78	70	130			
1,1-Dichloroethane	9.52	ug/L	2.0	95	70	130			
1,2-Dichloroethane	9.92	ug/L	2.0	99	70	130			
1,1-Dichloroethene	9.76	ug/L	2.0	98	70	130			
cis-1,2-Dichloroethene	9.84	ug/L	2.0	98	70	130			
trans-1,2-Dichloroethene	10.2	ug/L	2.0	102	70	130			
1,2-Dichloropropane	12.5	ug/L	2.0	125	70	130			
cis-1,3-Dichloropropene	11.4	ug/L	2.0	114	70	130			
trans-1,3-Dichloropropene	12.3	ug/L	2.0	123	70	130			
Ethylbenzene	10.7	ug/L	2.0	107	70	130			
2-Hexanone	124	ug/L	40	124	70	130			
Iodomethane	9.84	ug/L	2.0	98	70	130			
Methyl ethyl ketone	93.6	ug/L	40	94	70	130			
Methyl isobutyl ketone	121	ug/L	40	121	70	130			
Methylene chloride	8.32	ug/L	2.0	83	70	130			
Styrene	11.9	ug/L	2.0	119	70	130			
1,1,1,2-Tetrachloroethane	11.0	ug/L	2.0	110	70	130			
1,1,2,2-Tetrachloroethane	8.96	ug/L	2.0	90	70	130			
Tetrachloroethene	12.0	ug/L	2.0	116	70	130			
Toluene	11.5	ug/L	2.0	115	70	130			
1,1,1-Trichloroethane	10.1	ug/L	2.0	101	70	130			
1,1,2-Trichloroethane	11.3	ug/L	2.0	113	70	130			
Trichloroethene	11.5	ug/L	2.0	115	70	130			
Trichlorofluoromethane	9.12	ug/L	2.0	91	70	130			
1,2,3-Trichloropropane	8.56	ug/L	2.0	86	70	130			
Vinyl acetate	8.16	ug/L	2.0	82	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46118		
Sample ID: H08060389-010AMS	Sample Matrix Spike		Run: 1SATURN_080623A				06/24/08 16:31		
Vinyl chloride	7.59	ug/L	2.0	76	70	130			
m+p-Xylenes	21.1	ug/L	2.0	106	70	130			
o-Xylene	10.6	ug/L	2.0	106	70	130			
Xylenes, Total	31.8	ug/L	2.0	106	70	130			
Surr: 1,2-Dichloroethane-d4			2.0	90	70	130			
Surr: Dibromofluoromethane			2.0	92	70	130			
Surr: p-Bromofluorobenzene			2.0	84	70	130			
Surr: Toluene-d8			2.0	107	70	130			
Sample ID: H08060389-010AMSD	Sample Matrix Spike Duplicate		Run: 1SATURN_080623A				06/24/08 17:00		
Acetone	82.4	ug/L	40	82	70	130	4.7	20	
Acrylonitrile	86.4	ug/L	40	86	70	130	12	20	
Benzene	10.9	ug/L	2.0	109	70	130	2.9	20	
Bromochloromethane	8.96	ug/L	2.0	90	70	130	0.9	20	
Bromodichloromethane	10.6	ug/L	2.0	106	70	130	0.8	20	
Bromoform	8.48	ug/L	2.0	85	70	130	14	20	
Bromomethane	8.56	ug/L	2.0	86	70	130	2.8	20	
Carbon disulfide	10.9	ug/L	2.0	109	70	130	4.5	20	
Carbon tetrachloride	10.1	ug/L	2.0	101	70	130	0.0	20	
Chlorobenzene	10.8	ug/L	2.0	108	70	130	4.5	20	
Chlorodibromomethane	8.88	ug/L	2.0	89	70	130	4.4	20	
Chloroethane	8.64	ug/L	2.0	86	70	130	3.8	20	
Chloroform	9.76	ug/L	2.0	89	70	130	0.0	20	
Chloromethane	6.54	ug/L	2.0	65	70	130	3.0	20	S
1,2-Dibromo-3-chloropropane	8.88	ug/L	2.0	89	70	130	3.7	20	
1,2-Dibromoethane	10.0	ug/L	2.0	100	70	130	2.4	20	
Dibromomethane	11.0	ug/L	2.0	110	70	130	1.4	20	
1,2-Dichlorobenzene	10.6	ug/L	2.0	106	70	130	0.8	20	
1,4-Dichlorobenzene	8.96	ug/L	2.0	90	70	130	4.4	20	
trans-1,4-Dichloro-2-butene	7.85	ug/L	2.0	78	70	130	2.8	20	
Dichlorodifluoromethane	8.40	ug/L	2.0	84	70	130	7.9	20	
1,1-Dichloroethane	9.44	ug/L	2.0	94	70	130	0.8	20	
1,2-Dichloroethane	9.20	ug/L	2.0	92	70	130	7.5	20	
1,1-Dichloroethene	9.44	ug/L	2.0	94	70	130	3.3	20	
cis-1,2-Dichloroethene	10.0	ug/L	2.0	100	70	130	1.6	20	
trans-1,2-Dichloroethene	10.4	ug/L	2.0	104	70	130	1.6	20	
1,2-Dichloropropane	12.2	ug/L	2.0	122	70	130	2.6	20	
cis-1,3-Dichloropropene	11.3	ug/L	2.0	113	70	130	0.7	20	
trans-1,3-Dichloropropene	12.2	ug/L	2.0	122	70	130	1.3	20	
Ethylbenzene	10.9	ug/L	2.0	109	70	130	1.5	20	
2-Hexanone	126	ug/L	40	126	70	130	1.9	20	
Iodomethane	9.68	ug/L	2.0	97	70	130	1.6	20	
Methyl ethyl ketone	85.6	ug/L	40	86	70	130	8.9	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46118		
Sample ID: H08060389-010AMSD	Sample Matrix Spike Duplicate			Run: 1SATURN_080623A			06/24/08 17:00		
Methyl isobutyl ketone	112	ug/L	40	112	70	130	7.6	20	
Methylene chloride	8.40	ug/L	2.0	84	70	130	1.0	20	
Styrene	11.7	ug/L	2.0	117	70	130	2.0	20	
1,1,1,2-Tetrachloroethane	11.1	ug/L	2.0	111	70	130	0.7	20	
1,1,2,2-Tetrachloroethane	8.24	ug/L	2.0	82	70	130	8.4	20	
Tetrachloroethene	12.0	ug/L	2.0	116	70	130	0.0	20	
Toluene	11.3	ug/L	2.0	113	70	130	2.1	20	
1,1,1-Trichloroethane	10.0	ug/L	2.0	100	70	130	0.8	20	
1,1,2-Trichloroethane	11.8	ug/L	2.0	118	70	130	4.2	20	
Trichloroethene	11.2	ug/L	2.0	112	70	130	2.8	20	
Trichlorofluoromethane	9.28	ug/L	2.0	93	70	130	1.7	20	
1,2,3-Trichloropropane	8.32	ug/L	2.0	83	70	130	2.8	20	
Vinyl acetate	7.66	ug/L	2.0	77	70	130	6.4	20	
Vinyl chloride	8.40	ug/L	2.0	84	70	130	10	20	
m+p-Xylenes	21.3	ug/L	2.0	106	70	130	0.8	20	
o-Xylene	11.0	ug/L	2.0	110	70	130	3.7	20	
Xylenes, Total	32.3	ug/L	2.0	108	70	130	1.7	20	
Surr: 1,2-Dichloroethane-d4			2.0	90	70	130	0.0	20	
Surr: Dibromofluoromethane			2.0	90	70	130	0.0	20	
Surr: p-Bromofluorobenzene			2.0	85	70	130	0.0	20	
Surr: Toluene-d8			2.0	109	70	130	0.0	20	



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B			Analytical Run: 1SATURN_080625B						
Sample ID: CCV062508A	Continuing Calibration Verification Standard								06/25/08 09:41
Acetone	48.4	ug/L	20	97	70	130			
Acrylonitrile	46.8	ug/L	20	94	70	130			
Benzene	5.92	ug/L	1.0	118	70	130			
Bromochloromethane	5.08	ug/L	1.0	102	70	130			
Bromodichloromethane	5.04	ug/L	1.0	101	70	130			
Bromoform	4.88	ug/L	1.0	98	70	130			
Bromomethane	4.56	ug/L	1.0	91	70	130			
Carbon disulfide	5.44	ug/L	1.0	109	70	130			
Carbon tetrachloride	5.28	ug/L	1.0	106	70	130			
Chlorobenzene	5.28	ug/L	1.0	106	70	130			
Chlorodibromomethane	5.00	ug/L	1.0	100	70	130			
Chloroethane	5.36	ug/L	1.0	107	70	130			
Chloroform	4.72	ug/L	1.0	94	80	120			
Chloromethane	4.88	ug/L	1.0	98	70	130			
1,2-Dibromo-3-chloropropane	4.56	ug/L	1.0	91	70	130			
1,2-Dibromoethane	5.76	ug/L	1.0	115	70	130			
Dibromomethane	4.84	ug/L	1.0	97	70	130			
1,2-Dichlorobenzene	5.12	ug/L	1.0	102	70	130			
1,4-Dichlorobenzene	5.00	ug/L	1.0	100	70	130			
trans-1,4-Dichloro-2-butene	4.60	ug/L	1.0	92	70	130			
Dichlorodifluoromethane	4.60	ug/L	1.0	92	70	130			
1,1-Dichloroethane	5.52	ug/L	1.0	110	70	130			
1,2-Dichloroethane	4.76	ug/L	1.0	95	70	130			
1,1-Dichloroethene	5.20	ug/L	1.0	104	80	120			
cis-1,2-Dichloroethene	5.08	ug/L	1.0	102	70	130			
trans-1,2-Dichloroethene	5.60	ug/L	1.0	112	70	130			
1,2-Dichloropropane	5.96	ug/L	1.0	119	80	120			
cis-1,3-Dichloropropene	5.68	ug/L	1.0	114	70	130			
trans-1,3-Dichloropropene	5.56	ug/L	1.0	111	70	130			
Ethylbenzene	5.56	ug/L	1.0	111	80	120			
2-Hexanone	48.4	ug/L	20	97	70	130			
Iodomethane	4.64	ug/L	1.0	93	70	130			
Methyl ethyl ketone	42.4	ug/L	20	85	70	130			
Methyl isobutyl ketone	48.4	ug/L	20	97	70	130			
Methylene chloride	4.36	ug/L	1.0	87	70	130			
Styrene	5.40	ug/L	1.0	108	70	130			
1,1,1,2-Tetrachloroethane	5.88	ug/L	1.0	118	70	130			
1,1,2,2-Tetrachloroethane	4.80	ug/L	1.0	96	70	130			
Tetrachloroethene	5.60	ug/L	1.0	112	70	130			
Toluene	5.60	ug/L	1.0	112	80	120			
1,1,1-Trichloroethane	5.32	ug/L	1.0	106	70	130			
1,1,2-Trichloroethane	5.56	ug/L	1.0	111	70	130			
Trichloroethene	5.64	ug/L	1.0	113	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Analytical Run: 1SATURN_080625B		
Sample ID: CCV062508A	Continuing Calibration Verification Standard								06/25/08 09:41
Trichlorofluoromethane	4.72	ug/L	1.0	94	70	130			
1,2,3-Trichloropropane	5.80	ug/L	1.0	116	70	130			
Vinyl acetate	4.36	ug/L	1.0	87	70	130			
Vinyl chloride	4.56	ug/L	1.0	91	80	120			
m+p-Xylenes	10.3	ug/L	1.0	103	70	130			
o-Xylene	5.20	ug/L	1.0	104	70	130			
Xylenes, Total	15.5	ug/L	1.0	103	70	130			
Surr: 1,2-Dichloroethane-d4			1.0	82	70	130			
Surr: Dibromofluoromethane			1.0	94	70	130			
Surr: p-Bromofluorobenzene			1.0	86	70	130			
Surr: Toluene-d8			1.0	96	70	130			

Method: SW8260B							Batch: R46203		
Sample ID: LCS062508A	Laboratory Control Sample				Run: 1SATURN_080625B		06/25/08 10:25		
Acetone	45.2	ug/L	20	90	70	130			
Acrylonitrile	41.6	ug/L	20	83	70	130			
Benzene	5.48	ug/L	1.0	110	70	130			
Bromochloromethane	4.72	ug/L	1.0	94	70	130			
Bromodichloromethane	4.60	ug/L	1.0	92	70	130			
Bromoform	4.56	ug/L	1.0	91	70	130			
Bromomethane	4.56	ug/L	1.0	91	70	130			
Carbon disulfide	5.60	ug/L	1.0	112	70	130			
Carbon tetrachloride	5.00	ug/L	1.0	100	70	130			
Chlorobenzene	4.80	ug/L	1.0	96	70	130			
Chlorodibromomethane	4.52	ug/L	1.0	90	70	130			
Chloroethane	5.48	ug/L	1.0	110	70	130			
Chloroform	4.60	ug/L	1.0	92	70	130			
Chloromethane	4.88	ug/L	1.0	98	70	130			
1,2-Dibromo-3-chloropropane	3.96	ug/L	1.0	79	70	130			
1,2-Dibromoethane	5.16	ug/L	1.0	103	70	130			
Dibromomethane	4.68	ug/L	1.0	94	70	130			
1,2-Dichlorobenzene	4.60	ug/L	1.0	92	70	130			
1,4-Dichlorobenzene	4.56	ug/L	1.0	91	70	130			
trans-1,4-Dichloro-2-butene	4.52	ug/L	1.0	90	70	130			
Dichlorodifluoromethane	4.36	ug/L	1.0	87	70	130			
1,1-Dichloroethane	4.80	ug/L	1.0	96	70	130			
1,2-Dichloroethane	4.20	ug/L	1.0	84	70	130			
1,1-Dichloroethene	4.80	ug/L	1.0	96	70	130			
cis-1,2-Dichloroethene	4.44	ug/L	1.0	89	70	130			
trans-1,2-Dichloroethene	5.08	ug/L	1.0	102	70	130			
1,2-Dichloropropane	5.64	ug/L	1.0	113	70	130			
cis-1,3-Dichloropropene	5.28	ug/L	1.0	106	70	130			
trans-1,3-Dichloropropene	5.68	ug/L	1.0	114	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46203		
Sample ID: LCS062508A	Laboratory Control Sample			Run: 1SATURN_080625B			06/25/08 10:25		
Ethylbenzene	5.08	ug/L	1.0	102	70	130			
2-Hexanone	48.0	ug/L	20	96	70	130			
Iodomethane	4.76	ug/L	1.0	95	70	130			
Methyl ethyl ketone	42.0	ug/L	20	84	70	130			
Methyl isobutyl ketone	46.0	ug/L	20	92	70	130			
Methylene chloride	3.92	ug/L	1.0	78	70	130			
Styrene	4.96	ug/L	1.0	99	70	130			
1,1,1,2-Tetrachloroethane	5.40	ug/L	1.0	108	70	130			
1,1,2,2-Tetrachloroethane	4.32	ug/L	1.0	86	70	130			
Tetrachloroethene	5.48	ug/L	1.0	110	70	130			
Toluene	5.24	ug/L	1.0	105	70	130			
1,1,1-Trichloroethane	5.00	ug/L	1.0	100	70	130			
1,1,2-Trichloroethane	5.28	ug/L	1.0	106	70	130			
Trichloroethene	5.28	ug/L	1.0	106	70	130			
Trichlorofluoromethane	5.16	ug/L	1.0	103	70	130			
1,2,3-Trichloropropane	4.60	ug/L	1.0	92	70	130			
Vinyl acetate	4.16	ug/L	1.0	83	70	130			
Vinyl chloride	4.48	ug/L	1.0	90	70	130			
m+p-Xylenes	9.52	ug/L	1.0	95	70	130			
o-Xylene	4.96	ug/L	1.0	99	70	130			
Xylenes, Total	14.5	ug/L	1.0	97	70	130			
Surr: 1,2-Dichloroethane-d4			1.0	89	70	130			
Surr: Dibromofluoromethane			1.0	98	70	130			
Surr: p-Bromofluorobenzene			1.0	87	70	130			
Surr: Toluene-d8			1.0	101	70	130			
Sample ID: MBLK062508A	Method Blank			Run: 1SATURN_080625B			06/25/08 11:40		
Acetone	ND	ug/L	20						
Acrylonitrile	ND	ug/L	20						
Benzene	ND	ug/L	1.0						
Bromochloromethane	ND	ug/L	1.0						
Bromodichloromethane	ND	ug/L	1.0						
Bromoform	ND	ug/L	1.0						
Bromomethane	ND	ug/L	1.0						
Carbon disulfide	ND	ug/L	1.0						
Carbon tetrachloride	ND	ug/L	1.0						
Chlorobenzene	ND	ug/L	1.0						
Chlorodibromomethane	ND	ug/L	1.0						
Chloroethane	ND	ug/L	1.0						
Chloroform	ND	ug/L	1.0						
Chloromethane	ND	ug/L	1.0						
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0						
1,2-Dibromoethane	ND	ug/L	1.0						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46203		
Sample ID: MBLK062508A	Method Blank		Run: 1SATURN_080625B				06/25/08 11:40		
Dibromomethane	ND	ug/L	1.0						
1,2-Dichlorobenzene	ND	ug/L	1.0						
1,4-Dichlorobenzene	ND	ug/L	1.0						
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0						
Dichlorodifluoromethane	ND	ug/L	1.0						
1,1-Dichloroethane	ND	ug/L	1.0						
1,2-Dichloroethane	ND	ug/L	1.0						
1,1-Dichloroethene	ND	ug/L	1.0						
cis-1,2-Dichloroethene	ND	ug/L	1.0						
trans-1,2-Dichloroethene	ND	ug/L	1.0						
1,2-Dichloropropane	ND	ug/L	1.0						
cis-1,3-Dichloropropene	ND	ug/L	1.0						
trans-1,3-Dichloropropene	ND	ug/L	1.0						
Ethylbenzene	ND	ug/L	1.0						
2-Hexanone	ND	ug/L	20						
Iodomethane	ND	ug/L	1.0						
Methyl ethyl ketone	ND	ug/L	20						
Methyl isobutyl ketone	ND	ug/L	20						
Methylene chloride	ND	ug/L	1.0						
Styrene	ND	ug/L	1.0						
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0						
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0						
Tetrachloroethene	ND	ug/L	1.0						
Toluene	ND	ug/L	1.0						
1,1,1-Trichloroethane	ND	ug/L	1.0						
1,1,2-Trichloroethane	ND	ug/L	1.0						
Trichloroethene	ND	ug/L	1.0						
Trichlorofluoromethane	ND	ug/L	1.0						
1,2,3-Trichloropropane	ND	ug/L	1.0						
Vinyl acetate	ND	ug/L	1.0						
Vinyl chloride	ND	ug/L	1.0						
m+p-Xylenes	ND	ug/L	1.0						
o-Xylene	ND	ug/L	1.0						
Xylenes, Total	ND	ug/L	1.0						
Surr: 1,2-Dichloroethane-d4			1.0	93	70	130			
Surr: Dibromofluoromethane			1.0	96	70	130			
Surr: p-Bromofluorobenzene			1.0	85	70	130			
Surr: Toluene-d8			1.0	96	70	130			
Sample ID: H08060419-001EMS	Sample Matrix Spike		Run: 1SATURN_080625B				06/25/08 20:16		
Acetone	88.8	ug/L	40	89	70	130			
Acrylonitrile	94.4	ug/L	40	94	70	130			
Benzene	9.68	ug/L	2.0	97	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B									Batch: R46203
Sample ID: H08060419-001EMS	Sample Matrix Spike				Run: 1SATURN_080625B				06/25/08 20:16
Bromochloromethane	8.72	ug/L	2.0	87	70	130			
Bromodichloromethane	10.5	ug/L	2.0	105	70	130			
Bromoform	9.36	ug/L	2.0	94	70	130			
Bromomethane	9.92	ug/L	2.0	99	70	130			
Carbon disulfide	11.2	ug/L	2.0	112	70	130			
Carbon tetrachloride	9.60	ug/L	2.0	96	70	130			
Chlorobenzene	10.3	ug/L	2.0	103	70	130			
Chlorodibromomethane	8.64	ug/L	2.0	86	70	130			
Chloroethane	9.76	ug/L	2.0	98	70	130			
Chloroform	9.12	ug/L	2.0	91	70	130			
Chloromethane	8.08	ug/L	2.0	81	70	130			
1,2-Dibromo-3-chloropropane	8.64	ug/L	2.0	86	70	130			
1,2-Dibromoethane	9.76	ug/L	2.0	98	70	130			
Dibromomethane	10.7	ug/L	2.0	107	70	130			
1,2-Dichlorobenzene	9.92	ug/L	2.0	99	70	130			
1,4-Dichlorobenzene	9.04	ug/L	2.0	90	70	130			
trans-1,4-Dichloro-2-butene	7.22	ug/L	2.0	72	70	130			
Dichlorodifluoromethane	8.72	ug/L	2.0	87	70	130			
1,1-Dichloroethane	9.44	ug/L	2.0	94	70	130			
1,2-Dichloroethane	9.36	ug/L	2.0	94	70	130			
1,1-Dichloroethene	9.44	ug/L	2.0	94	70	130			
cis-1,2-Dichloroethene	9.76	ug/L	2.0	98	70	130			
trans-1,2-Dichloroethene	10.3	ug/L	2.0	103	70	130			
1,2-Dichloropropane	11.8	ug/L	2.0	118	70	130			
cis-1,3-Dichloropropene	11.7	ug/L	2.0	117	70	130			
trans-1,3-Dichloropropene	11.8	ug/L	2.0	118	70	130			
Ethylbenzene	10.4	ug/L	2.0	104	70	130			
2-Hexanone	122	ug/L	40	122	70	130			
Iodomethane	9.68	ug/L	2.0	97	70	130			
Methyl ethyl ketone	97.6	ug/L	40	98	70	130			
Methyl isobutyl ketone	117	ug/L	40	117	70	130			
Methylene chloride	8.08	ug/L	2.0	81	70	130			
Styrene	11.5	ug/L	2.0	115	70	130			
1,1,1,2-Tetrachloroethane	11.0	ug/L	2.0	110	70	130			
1,1,2,2-Tetrachloroethane	8.24	ug/L	2.0	82	70	130			
Tetrachloroethene	11.6	ug/L	2.0	116	70	130			
Toluene	10.8	ug/L	2.0	108	70	130			
1,1,1-Trichloroethane	9.76	ug/L	2.0	98	70	130			
1,1,2-Trichloroethane	10.9	ug/L	2.0	109	70	130			
Trichloroethene	11.0	ug/L	2.0	110	70	130			
Trichlorofluoromethane	10.1	ug/L	2.0	101	70	130			
1,2,3-Trichloropropane	8.08	ug/L	2.0	81	70	130			
Vinyl acetate	9.04	ug/L	2.0	90	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: R46203		
Sample ID: H08060419-001EMS	Sample Matrix Spike		Run: 1SATURN_080625B				06/25/08 20:16		
Vinyl chloride	9.12	ug/L	2.0	91	70	130			
m+p-Xylenes	20.8	ug/L	2.0	104	70	130			
o-Xylene	10.8	ug/L	2.0	108	70	130			
Xylenes, Total	31.6	ug/L	2.0	105	70	130			
Surr: 1,2-Dichloroethane-d4			2.0	98	70	130			
Surr: Dibromofluoromethane			2.0	94	70	130			
Surr: p-Bromofluorobenzene			2.0	81	70	130			
Surr: Toluene-d8			2.0	105	70	130			
Sample ID: H08060419-001EMSD	Sample Matrix Spike Duplicate		Run: 1SATURN_080625B				06/25/08 20:46		
Acetone	88.0	ug/L	40	88	70	130	0.9	20	
Acrylonitrile	96.0	ug/L	40	96	70	130	1.7	20	
Benzene	9.44	ug/L	2.0	94	70	130	2.5	20	
Bromochloromethane	8.32	ug/L	2.0	83	70	130	4.7	20	
Bromodichloromethane	10.4	ug/L	2.0	104	70	130	0.8	20	
Bromoform	9.76	ug/L	2.0	98	70	130	4.2	20	
Bromomethane	9.76	ug/L	2.0	98	70	130	1.6	20	
Carbon disulfide	10.4	ug/L	2.0	104	70	130	7.4	20	
Carbon tetrachloride	9.36	ug/L	2.0	94	70	130	2.5	20	
Chlorobenzene	10.2	ug/L	2.0	102	70	130	0.8	20	
Chlorodibromomethane	9.36	ug/L	2.0	94	70	130	8.0	20	
Chloroethane	10.6	ug/L	2.0	106	70	130	7.9	20	
Chloroform	8.72	ug/L	2.0	87	70	130	4.5	20	
Chloromethane	7.69	ug/L	2.0	77	70	130	5.0	20	
1,2-Dibromo-3-chloropropane	9.28	ug/L	2.0	93	70	130	7.1	20	
1,2-Dibromoethane	10.7	ug/L	2.0	107	70	130	9.4	20	
Dibromomethane	10.4	ug/L	2.0	104	70	130	3.0	20	
1,2-Dichlorobenzene	9.84	ug/L	2.0	98	70	130	0.8	20	
1,4-Dichlorobenzene	8.72	ug/L	2.0	87	70	130	3.6	20	
trans-1,4-Dichloro-2-butene	8.16	ug/L	2.0	82	70	130	12	20	
Dichlorodifluoromethane	8.64	ug/L	2.0	86	70	130	0.9	20	
1,1-Dichloroethane	8.96	ug/L	2.0	90	70	130	5.2	20	
1,2-Dichloroethane	9.28	ug/L	2.0	93	70	130	0.9	20	
1,1-Dichloroethene	8.88	ug/L	2.0	89	70	130	6.1	20	
cis-1,2-Dichloroethene	9.12	ug/L	2.0	91	70	130	6.8	20	
trans-1,2-Dichloroethene	9.84	ug/L	2.0	98	70	130	4.8	20	
1,2-Dichloropropane	11.8	ug/L	2.0	118	70	130	0.0	20	
cis-1,3-Dichloropropene	11.2	ug/L	2.0	112	70	130	4.2	20	
trans-1,3-Dichloropropene	11.8	ug/L	2.0	118	70	130	0.0	20	
Ethylbenzene	10.6	ug/L	2.0	106	70	130	1.5	20	
2-Hexanone	127	ug/L	40	127	70	130	3.8	20	
Iodomethane	9.36	ug/L	2.0	94	70	130	3.4	20	
Methyl ethyl ketone	96.8	ug/L	40	97	70	130	0.8	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/12/08
Work Order: H08060394

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B									Batch: R46203
Sample ID: H08060419-001EMSD	Sample Matrix Spike Duplicate		Run: 1SATURN_080625B					06/25/08 20:46	
Methyl isobutyl ketone	124	ug/L	40	124	70	130	6.0	20	
Methylene chloride	7.66	ug/L	2.0	77	70	130	5.3	20	
Styrene	12.0	ug/L	2.0	120	70	130	4.1	20	
1,1,1,2-Tetrachloroethane	10.6	ug/L	2.0	106	70	130	3.7	20	
1,1,2,2-Tetrachloroethane	8.80	ug/L	2.0	88	70	130	6.6	20	
Tetrachloroethene	10.6	ug/L	2.0	106	70	130	9.4	20	
Toluene	10.9	ug/L	2.0	109	70	130	0.7	20	
1,1,1-Trichloroethane	9.44	ug/L	2.0	94	70	130	3.3	20	
1,1,2-Trichloroethane	11.2	ug/L	2.0	112	70	130	2.9	20	
Trichloroethene	11.4	ug/L	2.0	114	70	130	2.9	20	
Trichlorofluoromethane	10.7	ug/L	2.0	107	70	130	6.2	20	
1,2,3-Trichloropropane	8.48	ug/L	2.0	85	70	130	4.8	20	
Vinyl acetate	9.20	ug/L	2.0	92	70	130	1.8	20	
Vinyl chloride	9.36	ug/L	2.0	94	70	130	2.6	20	
m+p-Xylenes	20.8	ug/L	2.0	104	70	130	0.0	20	
o-Xylene	10.7	ug/L	2.0	107	70	130	0.7	20	
Xylenes, Total	31.5	ug/L	2.0	105	70	130	0.3	20	
Surr: 1,2-Dichloroethane-d4			2.0	96	70	130	0.0	20	
Surr: Dibromofluoromethane			2.0	92	70	130	0.0	20	
Surr: p-Bromofluorobenzene			2.0	87	70	130	0.0	20	
Surr: Toluene-d8			2.0	105	70	130	0.0	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

CHAIN OF CUSTODY RECORD

3020 Bozeman Avenue • Helena, Montana 59601 • (406) 443-4150

PROJ. NO.		PROJECT NAME		NO. OF CON- TAINERS	Commons UF/RAW	Nutrients UF/H ₂ SO ₄	Diss. Metal F/HNO ₃	CN UF/NaOH	Total Metals UF/HNO ₃	Total Recoverable Metals UF/HNO ₃	BTX	TPH	4F/MCL VOC-8260*						REMARKS
SAMPLERS: (Signature)																			
DATE	TIME	COMP	GRAB																
1273	City of Helena																		
Rist Z																			
6/17/08	1445		X	HL 0806-102	X	X	X	X					X						
	1100			HL 0806-104	X	X	X	X					X						H0806 0394-001
	1325			107															002
✓	1400			108															003
6/19/08	0830			109															004
	0945			112															005
	1115			114															006
	1130			115															007
	1310			116															008
✓	1515			117															009
6/19/08	0830			120															010
	0900			121															011
	0930			122															012
	1200			103															013
	1030			124															014
Relinquished (Signature)		Date/Time		Received by: (Signature)		Lab		P.O. #		Shipped via: Bus, Fed Ex, UPS									
Rist Z		6-19-08 13 ⁰⁶		[Signature]		Energy Lab		HLN09590		Other Hand delivered									
Relinquished (Signature)		Date/Time		Received by: (Signature)		Remarks		temp 23											
						* 0.001mg/L Detection Limit													
Relinquished (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time		Enclosed: ☒ Parameter sheet w/detection limits											
								☐ QA/QC standard mixing instructions ☐ Cover letter											
								☐ Other											
								Split Samples:											
								☐ Accepted ☐ Declined											
								Signature											

Table 1. Commons and Metals

1) Antimony ✓	13) Mercury -
2) Arsenic ✓	14) Nitrate ✓
3) Barium ✓	15) Nickel ✓
4) Beryllium ✓	16) Selenium ✓
5) Cadmium ✓	17) Silver -
6) Chloride ✓	18) Sulfate (SO ₄) ✓
7) Chromium ✓	19) Thallium -
8) Cobalt ✓	20) Vanadium ✓
9) Copper ✓	21) Zinc -
10) Cyanide ✓	22) Chemical Oxygen Demand (COD) ✓
11) Iron -	23) pH ✓
12) Lead ✓	24) Specific Conductance ✓

Table 2. Volatile Organic Compounds (EPA Method 8260)

1) Acetone	25) trans-1,3-Dichloropropene
2) Acrylonitrile	26) Ethylbenzene
3) Benzene	27) 2-Hexanone
4) Bromochloromethane	28) Methyl bromide
5) Bromoform	29) Methyl chloride
6) Carbon Disulfide	30) Methylene bromide
7) Carbon Tetrachloride	31) Methylene chloride
8) Chlorobenzene	32) Methyl ethyl ketone
9) Chloroethane	33) Methyl iodide
10) Chloroform	34) 4-Methyl-2-pentanone
11) Chlorodibromomethane	35) Styrene
12) 1,2-Dibromo-3-chloropropane	36) 1,1,1,2-Tetrachloroethane
13) 1,2-Dibromoethane	37) 1,1,2,2-Tetrachloroethane
14) 1,2-Dichlorobenzene	38) Tetrachloroethylene
15) 1,4-Dichlorobenzene	39) Toluene
16) trans-1,4-Dichloro-2-butene	40) 1,1,1-Trichloroethane
17) Dichlorodifluoromethane	41) 1,1,2-Trichloroethane
18) 1,1-Dichloroethane	42) Trichloroethene
19) 1,2-Dichloroethane	43) Trichlorofluoromethane
20) 1,1-Dichloroethylene	44) 1,2,3-Trichloropropane
21) cis-1,2-Dichloroethylene	45) Vinyl acetate
22) trans-1,2-Dichloroethylene	46) Vinyl chloride
23) 1,2-Dichloropropane	47) Xylenes
24) cis-1,3-Dichloropropene	

15 sets VOC 2/40/8260

Energy Laboratories Inc

Workorder Receipt Checklist



H08060394

Hydrometrics Inc

Login completed by: Wanda Johnson

Date and Time Received: 6/19/2008 1:06 PM

Reviewed by: Jee

Received by: wjj

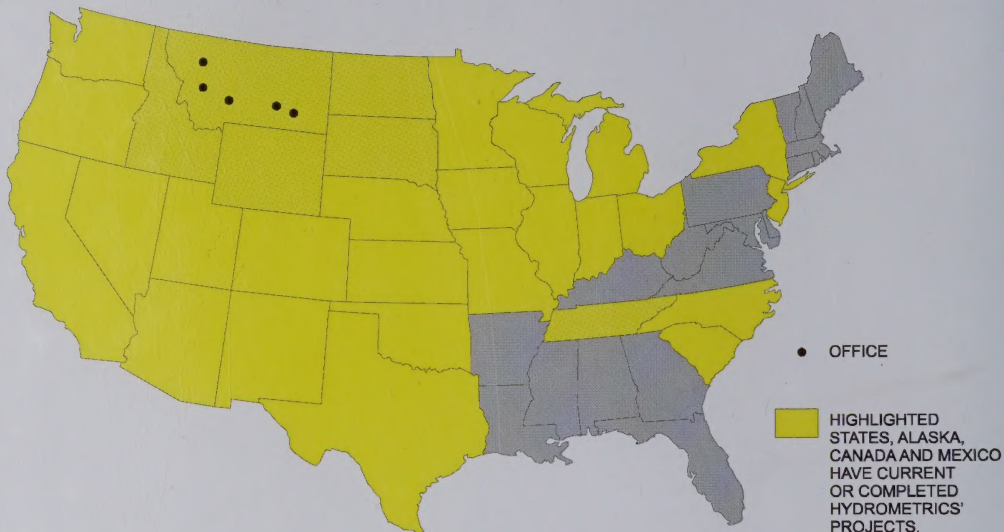
Reviewed Date: 6/24/08

Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	2.3°C On Ice
Water - VOA vials have zero headspace?	Yes ☒	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☒	Not Applicable ☐

Contact and Corrective Action Comments:

Sample HL-0806-108 added Nitric Acid to Metals container. Sample HL-0806-117 added Sulfuric Acid to nutrient container, Nitric Acid to Metals & Sodium Hydroxide Acid added to Cyanide sample. Wj



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